



REPORT OF AN ARCHAEOLOGICAL AND
ETHNOGRAPHIC SITE IDENTIFICATION
ABORIGINAL CULTURAL HERITAGE SURVEY
FOR THE SHIRE OF ASHBURTON'S
ONSLOW RECREATIONAL JETTY PROJECT,
ONSLOW, WA

OCTOBER 2024

For Buurabalayji Thalanyji Aboriginal Corporation



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Cover Photo: View of Old Jetty from end of survey area, Onslow (Archae-aus).



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Warning

Please be aware that this report may contain images of deceased persons and the use of their names, which in some Aboriginal communities may cause sadness, distress, or offence.

Disclaimer

The authors are not accountable for omissions and inconsistencies that may result from information which may come to light in the future but was not forthcoming at the time of this research.

Acknowledgements

Archae-aus wish to pay respects to Elders past and present and extend those respects to all Aboriginal people, especially the Thalanyji people who may view this report.

Consultation

The work described in this Report took place within a portion of Western Australia's Pilbara region that is subject to Thalanyji Native Title (WCD2008/003). Under the Native Title determination, the Thalanyji People are recognised as the holders of specific rights and interests over their traditional lands. The Buurabalayji Thalanyji Aboriginal Corporation (BTAC) is the Prescribed Body Corporate by whom the Native Title rights and interests are held. As such, the Thalanyji representatives who participated in the fieldwork, as detailed in this report, were nominated by BTAC.

The July 2024 fieldwork was undertaken collaboratively with BTAC. Their onsite representatives were briefed on the Scope of Works and the nature of the assessment methods throughout the fieldwork period. The Thalanyji representatives participated in all aspects of the survey and assessment.

Report Format

The format and contents of this report adhere to those suggested by the Western Australian Department of Planning, Lands and Heritage (DPLH) 'Guidelines for preparing Aboriginal Heritage Reports'¹.

The front end of the report includes the document information, terms and abbreviations used in the document and the personnel involved in the project. Section One introduces the project scope, which outlines the key objectives of the work, the personnel who attended the survey, and the relevant legislation used to guide the fieldwork and reporting processes. Section Two provides the archaeological and ethnographic background of the Project Area, and surrounding region, and previous heritage assessments undertaken in the area. Section Three describes the methods used for surveying and recording. Section Four discusses the results of the heritage assessment. Section Five outlines the cultural heritage management advice and recommendations. Appendices include survey coordinate data, and a copy of heritage register searches.

¹ <http://www.daa.wa.gov.au/globalassets/pdf-files/heritage-pdfs/aboriginal-heritage-surveys--guidelines.pdf>

Spatial Information

All spatial information contained in this report uses the Geocentric Datum of Australia (GDA94), Zone 50, unless otherwise specified. All information obtained from the Shire of Ashburton is assumed to be accurate to two decimal places. All spatial information obtained during fieldwork was taken using a handheld Garmin GPS with a purported accuracy of ± 3 m. Where we report spatial information collected in the field, we have opted for a slightly wider degree of accuracy of ± 5 m.

Authorship

This report was written by Rebecca Ryan [BA (Hons) Archaeology, *UWA*, MMHS, *USYD*], Fiona Hook [BA (Hons) Prehistoric and Historical Archaeology, *SydUni*; PhD Archaeology, *UWA*], Victoria Huntley [BA (Hons) Archaeology, *UWA*], Dr Jaimal Sandhu [BA *Uni. Melbourne*, BNSC *Uni. Melbourne*, Master of Anthropology *ANU*, PhD Social Anthropology, *Uni. Manchester*], and Marcel Teschendorff [BA/BComm, *Notre Dame University*, MMArch, *Flinders University*] with editorial assistance by Lucy Sinclair [BA (Hons) Archaeology, *UWA*] and Renée Gardiner [BA, *UQ*; BA (Hons) Archaeology, *La Trobe*].

The GIS data and maps were drafted by Victoria Huntley [BA (Hons) Archaeology, *UWA*] and Tehya Scholz [BA (Hons) Archaeology, *UNDA*].

EXECUTIVE SUMMARY

This document details the results of an archaeological and ethnographic Site Identification Aboriginal cultural heritage survey for the Shire of Ashburton's Onslow Recreational Jetty Project. The survey was undertaken for Buurabalayji Thalanyji Aboriginal Corporation (BTAC), with the participation of Thalanyji Traditional Owners. The Project Area is a 44.3-hectare area, located immediately west of the town of Onslow, at the tip of Beadon Point, intersecting the former Old Jetty.

The fieldwork took place between the 25th June to the 28th June 2024, inclusive of travel. Thalanyji Traditional Owners participated in all aspects of the archaeological and ethnographic survey.

The parties acknowledge that all heritage information provided by the Thalanyji People contained in any report remains the intellectual property of the Thalanyji People.

The objectives of the Scope of Works were to:

- ▶ Undertake an archaeological Site Identification Aboriginal cultural heritage survey of the Project Area (see Figure 1 and Map 1).
- ▶ Record all newly identified Aboriginal cultural heritage sites to Site Identification recording level.

Please note that the survey areas may be subject to negotiations between the Shire of Ashburton and BTAC under the *Native Title Act 1993*, and this report is not to be construed as providing any consents by BTAC for any land interests under the *Native Title Act 1993*.

SUMMARY OF RESULTS

The Site Identification survey of the Onslow Recreational Jetty Project Area is **complete**.

No new archaeological and ethnographic Aboriginal cultural heritage sites were identified.

A search on the DPLH ACHIS system shows one Registered site intersecting the Project Area, **Dew Talu (ID 6618)** (Ritual / Ceremonial; Water Source).

There are known sites nearby such as Onslow 1 (ID 8920) (Artefact Scatter / Midden) and Burubarladji (ID 6617) (Creation / Dreaming Narrative) (see Map 2). No previous survey work by Archae-aus and other consultants has occurred within the Project Area; however, surveys conducted nearby will be discussed further in the Report (Archae-aus 2021, 2022, 2023).

Table 1. Summary Onslow Recreational Jetty Project Area

Project Area	Assessment Level	Type	Completion Status	Area (m ²)	Known Sites
Onslow Recreational Jetty Project	Site Identification	Archaeological and Ethnographic	Complete	44,340	ID 6618 / Dew Talu

RECOMMENDATIONS

Based on the outcome and findings of the archaeological and ethnographic surveys, Archae-aus and the authors of this report make the following statements and recommendations:

- 1) The archaeological survey of the Onslow Recreational Jetty Project Area is **complete**.
- 2) The ethnographic survey of the Onslow Recreational Jetty Project Area is **complete**.
- 3) No new Aboriginal Cultural Heritage Sites were identified during the fieldwork.
- 4) According to DPLH records, Aboriginal Cultural Heritage Site **Dew Talu (ID 6618)** (Ritual / Ceremonial; Water Source) intersects the Project Area.
- 5) Further to the above and based on research for this and previous reports including accounts of senior Thalanyji people (Archae-aus 2021), we are of the opinion that the boundaries of **Dew Talu (ID 6618)** held by the DPLH are inaccurate, and that the Project Area does not intersect with this site.
- 6) It is understood that the Shire of Ashburton has applied for a section 18 under the *Aboriginal Heritage Act 1972* to disturb this **Dew Talu (ID 6618)**; noting that there is no intersection of proposed Shire of Ashburton project areas and this site.
- 7) It is recommended that BTAC confirm whether the DPLH boundaries for **Dew Talu (ID 6618)** are inaccurate, and if so, provide permission for Archae-aus to update the DPLH records.
- 8) The Thalanyji Traditional Owners during the fieldwork recommended the coastal dunes in the Project Area be subject to test pitting to identify any sub-surface archaeological sites before any ground disturbing works commence.
- 9) Owing to the high risk for sub-surface cultural material, the Thalanyji Traditional Owners recommended monitoring of all ground disturbance works during the construction of the Onslow Recreational Jetty Project.
- 10) The Project Area may be subject to negotiations between the Shire of Ashburton and BTAC under the *Native Title Act 1993*, and this report is not to be construed as providing any consents by BTAC for any land interests under the *Native Title Act 1993*.

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TERMS & ABBREVIATIONS

Term / Abbreviation	Meaning / Interpretation
Aboriginal archaeological place or assemblage	A place (or group of physical sites) in which evidence of past activity by Aboriginal people is preserved (either prehistoric or historic or contemporary), and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record.
Aboriginal Site	This term is used for Aboriginal heritage sites to which the AHA applies by the operation of Section 5. An Aboriginal site is defined by section 5 of the Act to mean: <ol style="list-style-type: none"> any place of importance where persons of Aboriginal descent have left any object, or have used, in connection with the traditional cultural life of the Aboriginal people, past or present; any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent; any place which is, or was, associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographical importance to the State; and any place where objects to which the Act applies are stored. How to report Aboriginal Cultural Heritage: https://www.wa.gov.au/government/document-collections/achknowledge-portal#how-to-report-potential-aboriginal-heritage
ACH	Aboriginal Cultural Heritage
ACHA	<i>The Aboriginal Cultural Heritage Act 2021</i>
ACHC	Aboriginal Cultural Heritage Council which previously superseded the APMC, now superseded by the Aboriginal Cultural Heritage Committee (Committee)
APMC	The former Aboriginal Cultural Material Committee (see ACHC)
ACHknowledge Portal	The portal is used to request advice, lodge and track applications and report information concerning Aboriginal cultural heritage.
Activity Area	Proposed work area / development envelope / project area
AHA	<i>The Aboriginal Heritage Act 1972</i>
ACHIS	The Aboriginal Cultural Heritage Inquiry System which holds information about: <ul style="list-style-type: none"> Registered Aboriginal Sites (ACH Register Layer) Lodged places (ACH Lodged Layer) Historic records (ACH Historic Layer)
ACHMP	Aboriginal Cultural Heritage Management Plan (no longer required)
AHIS	The DPLH Aboriginal Heritage Inquiry System, an online and publicly accessible copy of the Register of Aboriginal sites, superseded by the ACHIS.
Archaeological site	Is a place (or group of physical sites) in which evidence of human past activity is preserved (either prehistoric or historic or contemporary), and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record. This term is used to refer to a place regardless of whether it has been assessed under section 5 of the AHA.
Artefact	Any object (article, building, container, device, dwelling, ornament, pottery, tool, weapon, work of art etc.) made, affected, used, or modified in some way by humans.
Assessment	Professional opinion based on information that was forthcoming at the time of consideration
ATSIHP	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> (the ATSIHP Act).
CHMP	Cultural Heritage Management Plan
Committee	Aboriginal Cultural Heritage Committee (see ACHC)
Cultural material / archaeological material	Any object (article, building, container, device, dwelling, ornament, pottery, tool, weapon, work of art etc.) made, affected, used, or modified in some way by humans.

Term / Abbreviation	Meaning / Interpretation
DAA	Abbreviation for Department of Aboriginal Affairs, now the Department of Planning Lands and Heritage (the Department)
The Department	See DPLH
DPLH	Department of Planning Lands and Heritage (the Department)
Ethnographic Site	A place that is significant to an Aboriginal group because of its stories and connections. These places have intangible heritage values and are linked to traditional custom and law.
FPIC	Free Prior and Informed Consent
Harm	In relation to Activity impacting ACH, including destroying or damaging ACH – except where that harm relates to an Aboriginal person acting in accordance with the person's traditional rights, interests and responsibilities.
Heritage survey	Survey and inspection undertaken in order to investigate and document the archaeological record of a particular area
HISF	Heritage Information Submission Form now superseded by the ACHknowledge portal submission form and Aboriginal Heritage Enquiry Form
ICH	Indigenous Cultural Heritage
Lithoclasts	Fragments of other rocks and geological debris that has been eroded down to smaller sizes, through physical weathering, such as through water, gravity, wind, or ice.
Native Title	Recognition of the traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people
NTA	<i>Native Title Act 1993</i>
Object	An artefact - any object made, affected, used, or modified in some way by humans. Objects may be protected under the AHA if they meet the section 5 criteria for an Aboriginal site.
Palaeolandforms	Ancient landforms/landscapes
Physiographic regions	The division of landforms into distinct regions
Section 18 (s18)	The section of the <i>Aboriginal Heritage Act 1972</i> that details the process for permission to disturb the land on which a site is located.
Section 18 (s18) Approval	A letter from the Minister of Aboriginal Affairs providing consent for the disturbance of land on which a site is located.
Section 39(2) Assessment	Process of the ACMC (now the ACHC / Committee) assessing a reported site's significance and interest.
Sedimentology	The study of sediments, such as sand, silt and clay, and the processes that result in their formation.
Semi-diurnal tides	A tide which has a period or cycle of approximately half of 1 tidal day (about 12.5 hours). Semi-diurnal tides usually have 2 high and 2 low tides each day.
Subaerial shelf	The coastal shelf and landforms that exist, occur or are formed in the open air on the earth's surface, and not underwater or underground.
Survey Area	Entire area subject to the fieldwork survey, including the proposed Activity Area.
Terrigenous sedimentation	Sediments found in the marine environment derived from the erosion of terrestrial rocks.
Turbidity	A measure of the cloudiness of a fluid, caused by the presence of particles such as sediment, plankton, or organic matter.
Quaternary period	Occurring over the past 2.6 million years and includes the Pleistocene and Holocene periods of human occupation in Australia.
UCHA	<i>Underwater Cultural Heritage Act 2018</i>
WWII	World War II

SECTION ONE – INTRODUCTION

SCOPE OF WORKS

The Shire of Ashburton is proposing to redevelop an area (the Project Area) immediately northwest of the current Shire Caravan Park (see Map 1). The purpose of the Onslow Recreational Jetty Project is to provide a facility for both locals and visitors which will:

- ▶ Showcase stunning views over Beadon Bay and the Onslow foreshore area from the headland at the northern end of the town;
- ▶ Provide the opportunity for recreational fishing activities in both shallow and deeper water;
- ▶ Provide context for the original jetty, an important historical landmark of both national and state significance; and
- ▶ Provide a tourist drawcard which can be enjoyed by both locals and visitors.

On 28th May 2024 the Shire of Ashburton contacted Buurabalayji Thalanyji Aboriginal Corporation (BTAC) to coordinate a detailed Aboriginal Cultural Heritage (ACH) survey of the proposed works area for the Onslow Recreational Jetty Project. Buurabalayji Thalanyji Aboriginal Corporation is the Registered Native Title Body Corporate for the Thalanyji people under their native title determination. Onslow sits within the Thalanyji Native Title Determined area².

Archae-aus was contacted by Buurabalayji Thalanyji Aboriginal Corporation to provide heritage services (anthropology and archaeology) for the survey. After discussions with BTAC heritage officers Archae-aus proposed that the Aboriginal Cultural Heritage (ACH) survey would include the following:

- ▶ A site avoidance archaeological and ethnographic survey for the Shire of Ashburton Onslow Recreational Jetty Project with the survey area consisting of onshore and offshore areas, including:
 - Onshore: measuring approximately 200 m (north/south) by 180 m (east/west), covering 27,465 m².
 - Offshore – Onslow Jetty: measuring 203 m (north/south) by 70 m (east/west), covering 13,883 m².
- ▶ Desktop research, reviews of previous reports relating to the project area, a search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Cultural Heritage Inquiry System (ACHIS) and a review of archaeological and ethnographic site files (Registered Sites and Other Heritage Places) relating to the Project Area and its surrounds will be undertaken.
- ▶ That, as the offshore section of the Survey Area cannot be assessed directly, a desktop study of the submerged landscape will be completed; and in order to complete the submerged landscape study, Archae-aus requested that the Shire of Ashburton provide any completed offshore investigation reports including:
 - Nearshore aerial survey and bathymetric (below water) survey.
 - Preliminary Environmental Impact Assessment.
 - Metocean Analysis – assessment of extreme sea level and wave impacts.

²https://www.nntt.gov.au/News-and-Publications/hotspots/Documents/Hot%20Spots%2029/Hayes_Thalanyji_v%20WA.pdf

The fieldwork was conducted from the 25th June to the 28th June 2024, inclusive of travel. Thalanyji Traditional Owners participated in all aspects of the archaeological and ethnographic survey and are aware of the results detailed in this report.

The parties acknowledge that all heritage information provided by the Thalanyji People contained in any report remains the intellectual property of the Thalanyji People. Please note that the survey areas may be subject to negotiations between the Shire of Ashburton and BTAC under the *Native Title Act 1993*, and this report is not to be construed as providing any consents by BTAC for any land interests under the *Native Title Act 1993*.

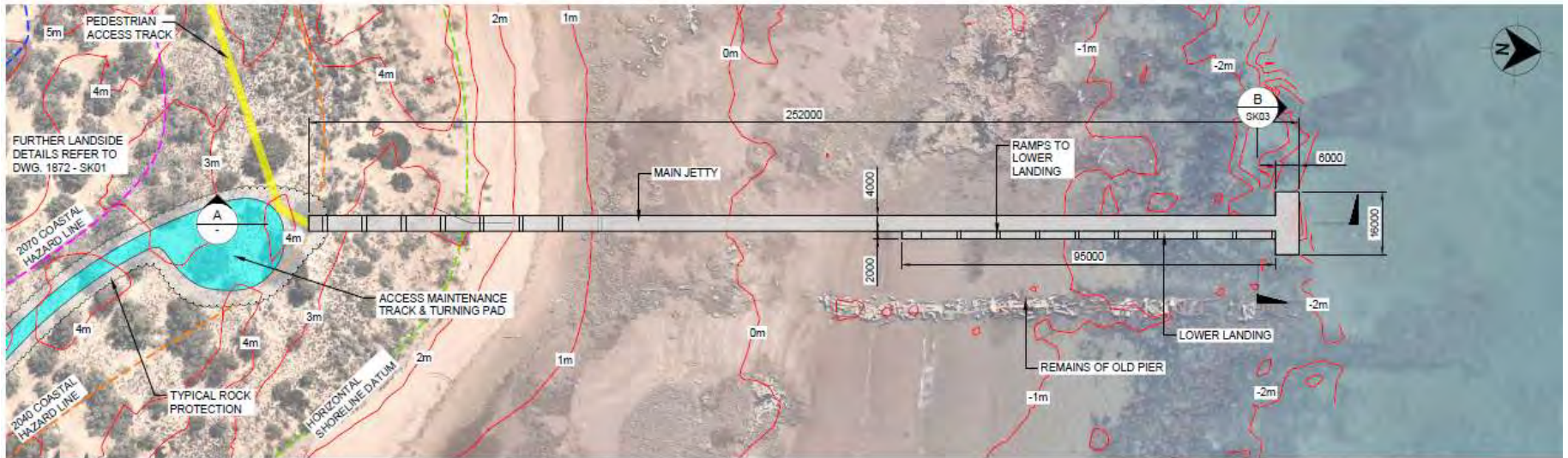
PROJECT AREA

The Project Area extends from the northern tip of Beadon Point within dunes west of the town of Onslow, across the beach and into the surf zone and nearshore zones (see Figure 1 and Map 1). The area was part of a WWII Naval Base and contains remains of the 1925 Onslow Jetty.

Through the development the ruins of the historical Onslow Jetty will be able to be viewed more clearly, and from a perspective which has only been previously available from the air. Story boards along the jetty (like those which already exist along the boardwalk) will highlight the significance of the historical jetty to the development of Onslow, and its importance as a strategic asset during the Second World War.

The works involve the construction of an unsealed maintenance track (which will also provide for pedestrian access), a boardwalk which connects to the existing boardwalk, an abutment with rock protection works and a piled jetty structure which extends from the abutment for approximately 250 m. The jetty also incorporates a low-level landing for recreational and fishing activities. The recreation area will be accessed via the existing road network. The following equipment may be used during construction of the proposed works:

- ▶ Excavator, grader, rollers, loaders, and dump trucks;
- ▶ Concrete trucks and concreting equipment;
- ▶ Crane, pile driving rig and drilling rig;
- ▶ Barges and other watercraft;
- ▶ Handheld compaction equipment;
- ▶ Work / site vehicles; and
- ▶ Other civil construction equipment as necessary.



CONCEPT PLAN - JETTY GENERAL ARRANGEMENT
1:1000

Figure 1. Concept Plan (Attachment A 2024 02 22), Shire of Ashburton

Map 1. Overview of the Survey Area



PERSONNEL

Buurabalayji Thalanyji Aboriginal Corporation

Glenys Hayes

(Traditional Owner, in Onslow office; Native Title and Heritage Manager)

Richard Gordine

(Heritage Coordinator)

Thalanyji Traditional Owners – Archaeological and Ethnographical Team

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(Senior Anthropologist)



Plate 1. Heritage Survey Team Pre-start Meeting

LEGISLATION

The following section briefly summarises the relevant legislation and guiding principles that may relate to the Project Area.

Aboriginal Heritage Legislation

WA Legislation

Aboriginal cultural heritage in WA has been protected by the *Aboriginal Heritage Act 1972* (the AHA), administered most recently by the Department of Lands, Planning and Heritage (DPLH). While a progressive piece of legislation in the 1970s, the AHA has come under increasing criticism in recent years and is widely recognised as not meeting 21st century best practice standards of heritage legislation. The destruction of Juukan Gorge by Rio Tinto in 2020 brought problems with the AHA into sharp focus, particularly the section 18 process for approving the destruction of Aboriginal Sites. This process was strongly criticised in *A Way Forward*, the final report of the Parliamentary Inquiry into the destruction of Juukan Gorge (Parliament of the Commonwealth of Australia, 2021). The committee concluded that the original good intentions of the legislation ultimately failed, and the law became in practice ‘a mechanism through which the disturbance, damage and destruction of both physical and intangible Aboriginal cultural heritage has repeatedly taken place’ (para 4.125). The committee attributed this to:

- ▶ Amendments that undermined the original purpose.
- ▶ How legislation was interpreted and administered by successive Ministers.
- ▶ The prominence of section 18 as the basis for the system of damage by permit.
- ▶ The role of the Minister as arbiter for decisions about approval, to the exclusion of the voice and interests of traditional owners.

In summary, the ‘AHA has failed to strike a balance between the needs and aspirations of the various parties and has excessively favoured the interests of proponents’ (para 4.126).

Other problems with the AHA include the role of Aboriginal people in the protection of their heritage, including the absence of legislated representation on the ACMC, definitions of Aboriginal cultural heritage and the lack of integration with Native Title legislation.

The committee encouraged the WA government to continue its consultation with regard to its draft Aboriginal Cultural Heritage Bill, recommending that it addressed the concerns already expressed in submissions by Aboriginal people and that it accommodates ‘the principles of free, prior and informed consent’, conducting consultation ‘in a way that accords with Aboriginal traditions of dialogue’ (para 4.135).

The WA government passed the *Aboriginal Cultural Heritage Act 2021* (ACH Act) in December 2021. The objectives of this legislation were:

- ▶ To recognise the importance of Aboriginal cultural heritage and Aboriginal custodianship.
- ▶ To recognise, protect and preserve Aboriginal cultural heritage.
- ▶ To manage activities that may harm Aboriginal cultural heritage.
- ▶ To promote an appreciation of Aboriginal cultural heritage.

Due to extensive backlash and criticism of the ACHA, the WA Government has now officially repealed the ACHA and instead introduced amendments to the AHA (an amended version), which was

proclaimed on the 15 November 2023. The amendments to the AHA attempt to address the criticisms of the Section 18 process by:

- ▶ Formal recognition of Native Title holders and rights of appeal in respect of s18 decisions by the Minister.
- ▶ Replacement of the APMC with an Aboriginal Heritage Committee, based on the composition of the Aboriginal Heritage Council established under the ACHA, with male and female Aboriginal co-chairs, and preferably a majority of members of Aboriginal descent.
- ▶ Requirement to bring any new information with respect to a s18 approval.

Currently, DPLH have published the following documents following the revival of the AHA:

- ▶ **Consultation Policy** – outlining ‘the Government’s expectations of proponents to undertake consultation with Aboriginal people prior to submitting a section 18 notice’.
<https://www.wa.gov.au/government/document-collections/aboriginal-heritage-approvals#policy-and-guidelines>
- ▶ **Aboriginal Heritage Act 1972 Guidelines** – providing practical guidance for landowners where section 18 consent is required to impact Aboriginal cultural heritage (sites and objects).
https://www.wa.gov.au/system/files/2023-11/aboriginal_heritage_act_1972_guidelines.pdf

Under the AHA (s17) it remains an offence to alter an Aboriginal site in any way, including collecting artefacts; conceal a site or artefact; or excavate, destroy or damage in any way an Aboriginal site or artefact; without the authorisation of the Registrar of Aboriginal Sites under Section 16 or the Minister of Aboriginal Affairs under Section 18 of the AHA.

An Aboriginal site is defined in Section 5 of the AHA as:

- a) Any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people, past or present.
- b) Any sacred, ritual or ceremonial site which is of importance and special significance to persons of Aboriginal descent.
- c) Any place which, in the opinion of the Committee [i.e. Aboriginal Cultural Material Committee, or APMC], is or was associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State.
- d) Any place where objects to which the AHA applies are traditionally stored, or to which, under the provisions of the AHA, such objects have been taken or removed.

Section 39 (2) states that:

In evaluating the importance of places and objects the Committee [i.e. the APMC] shall have regard to —

- a) any existing use or significance attributed under relevant Aboriginal custom;
- b) any former or reputed use or significance which may be attributed upon the basis of tradition, historical association, or Aboriginal sentiment;
- c) any potential anthropological, archaeological or ethnographical interest; and
- d) aesthetic values.

Section 39 (3) stated that:

Associated sacred beliefs, and ritual or ceremonial usage, in so far as such matters can be ascertained, shall be regarded as the primary considerations to be taken into account in the evaluation of any place or object for the purposes of this Act.

Information about heritage places and their legal status is available through the DPLH Aboriginal Cultural Heritage Inquiry System (ACHIS)³. There are three categories by which the ACHIS now characterises heritage places:

- ▶ Registered Aboriginal Sites – Aboriginal Cultural Heritage (ACH) **Register layer**.
- ▶ Lodged places⁴ – Aboriginal Cultural Heritage (ACH) **Lodged layer**.
- ▶ Historic records - Aboriginal Cultural Heritage (ACH) **Historic layer**.

Fees

The WA Government has introduced new fees associated with section 16 and section 18 applications. Commercial and Government proponents are expected to pay the following fees for new applications:

- ▶ A \$250 application fee.
- ▶ \$5,096 multiplied by the number of **proposed investigation sites** for section 16 applications and **identified sites or places** for section 18 applications.

‘The Director General has the ability to waive, reduce or refund fees; and extend the time within which to pay fees. Any such matter will be considered on a case-by-case basis⁵’.

Commonwealth Legislation

Aboriginal heritage sites are also protected under the *Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (the HPA). The HPA complements state / territory legislation and is intended to be used only as a ‘last resort’ where state / territory laws and processes prove ineffective. Under the HPA the responsible Minister can make temporary or long-term declarations to protect areas and objects of significance under threat of injury or desecration. The HPA also encourages heritage protection through mediated negotiation and agreement between land users, developers and Aboriginal people.

Aboriginal human remains are protected under the AHA and the HPA. In addition, the discovery of human remains requires that the following people are informed: the State Coroner or local Police under section 17 of the *Coroners Act 1996*; the State Registrar of Aboriginal Sites under section 15 of the AHA and the Federal Minister for Aboriginal Affairs under Section 20 of the HPA.

In terms of broader recognition of Aboriginal rights, the Commonwealth *Native Title Act 1993* (the NTA) recognises the traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people. Under the NTA, native title claimants can make an application to the Federal Court to have their native title recognised by Australian law. The NTA was extensively amended in 1998, with further amendments occurring in 2007, and again in 2009. Under the future act provisions of the *Native Title Act 1993*, native title holders and registered native title claimants are entitled to certain

³ When searching based on shapefiles or coordinates, GDA2020 projection is not currently supported.

⁴ Information about these places is in the process of being verified by the Department and Committee.

⁵ <https://www.wa.gov.au/government/document-collections/aboriginal-heritage-approvals>

procedural rights, including a right to be notified of the proposed future act, or a right to object to the act, the opportunity to comment, the right to be consulted, the right to negotiate or the same rights as an ordinary title holder (freeholder).

Best-practice Standards - Australia

The Burra Charter

The Burra Charter (Australian ICOMOS, 2013) is the foundational document for conserving Australia's cultural heritage (both Aboriginal and non-Aboriginal). The Charter encapsulates two important aspects in conserving heritage places. First, it establishes the best practice principles and processes for understanding and assessing a place's significance, as well as developing and implementing a conservation plan. Second, the Charter defines and explains the four primary cultural values that may be ascribed to any place: aesthetic, historic, social or spiritual, and scientific. These values are essential as they delineate the types and quality of information needed to accurately determine a heritage place's significance.

Archaeological Sites

A Practice Note supplementing the Burra Charter entitled 'The Burra Charter and Archaeological Practice' states that the fundamental principles contained in the Burra Charter apply to archaeological sites. Article 13 of the Burra Charter states: 'Co-existence of cultural values should always be recognised, respected and encouraged. This is especially important in cases where there is conflict.' This will be relevant where:

- (a) archaeological features from the earliest phases of a site underlie more recent archaeological features of national, state or local significance, and
- (b) where they overlie Aboriginal archaeological remains.

Cultural Landscapes

A Practice Note supplementing the Burra Charter titled 'Practice Note: Cultural Landscapes' states:

In Australian cultural landscape management, it can be useful to think about the way certain categories (derived from UNESCO World Heritage meanings) can be used to frame the different attributes, character, and values of cultural landscape. The categories that are most useful are 'designed landscape', 'continuing or living landscape' and 'associative landscape'.

The Practice Note discusses cultural landscape in terms of cultural landscape as place, practice, process, and management. Section 5 of the Practice Note outlines the principles of cultural landscape in these terms. UNESCO (2021, paragraph 47) defines Associative Cultural Landscape as

'A landscape with 'powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be significant or even absent.'

The 'Darwin Statement' – Implementing Best Practice Cultural Heritage Principles

In 2018, the Heritage Chairs and Officials of Australia and New Zealand (HCOANZ) agreed to implement best practice cultural heritage principles under what they termed the 'Darwin Statement'. The Heritage Chairs were joined by representatives of Aboriginal and Torres Strait Islander heritage organisations from the Commonwealth, states and territories in an approach aimed at working together to advance 'a shared approach to Australia's cultural heritage' (Heritage Chairs of Australia and New Zealand, 2020, p. 33). The HCOANZ group emphasised the principles of:

- ▶ Sharing the comprehensive Australian heritage story (including the ‘critical importance’ of recording and sharing the stories of Aboriginal and Torres Strait Islander cultural heritage).
- ▶ Inclusion and engagement with Aboriginal and Torres Strait Islander people.
- ▶ Cooperation and collaboration.

Their objective was to facilitate Indigenous Cultural Heritage (ICH) legislation and policy across the country that is consistently of the highest standards.

The HCOANZ group made their recommendations at a time of statutory reviews of Commonwealth Acts, including the *Environment Protection and Biodiversity Act 1999* (Cth) (EPBC Act) and the Australian Heritage Strategy, the Commonwealth’s key heritage policy document. Their vision, captured in a document entitled *‘Dhawura Ngilan’/Remembering Country*, reminds us that, as a foundational principle, Australia’s Indigenous Peoples are entitled to expect that Indigenous Cultural Heritage legislation will uphold the international legal norms contained within the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), and that the key to UNDRIP is the principle of self-determination. The four primary visions of *‘Dhawura Ngilan’/Remembering Country* are:

1. Aboriginal and Torres Strait Islander people are the Custodians of their heritage. It is protected and celebrated for its intrinsic worth, cultural benefits and the well-being of current and future generations of Australians.
2. Aboriginal and Torres Strait Islander heritage is acknowledged and valued as central to Australia’s national heritage.
3. Aboriginal and Torres Strait Islander heritage is managed consistently across jurisdictions according to community ownership in a way that unites, connects, and aligns practice.
4. Aboriginal and Torres Strait Islander heritage is recognised for its global significance.

This is the current climate under which the former *Aboriginal Cultural Heritage Act 2021* (ACHA) evolved and was enacted, with the establishment of the ACH Council, and the Local Aboriginal Cultural Heritage Services (LACHS) to manage (their own) Aboriginal cultural heritage. Following the repeal of the ACHA, amendments were made to the re-enacted AHA, including the replacement of the ACHC with an Aboriginal Cultural Heritage Council (ACHC), with Aboriginal chairs and majority Aboriginal membership and the recognition of Native Title holders.

Aboriginal Community Engagement

In the *A Way Forward* report (Parliament of the Commonwealth of Australia, 2021: 256) the Centre for Social Responsibility in Mining submitted that mining companies do not have the capacity to avoid incidents such as the destruction of Juukan Gorge. The Centre suggested mining companies are not performing in their social responsibility to prevent activities that would be detrimental to the community.

The field of mining and social performance is in decline. This has weakened the ability of community relations and social performance professionals to challenge production priorities in circumstances where risks to community exceed reasonable thresholds. Our research highlights shortcomings across organisational structures, internal lines of reporting, management systems, incentives, and talent management.

Furthermore, Hon Warren Entsch MP (Chair) stated in the Foreword of the 2020 *Never Again Interim Report*, following the Juukan disaster, that corporate Australia ‘can no longer ignore the link between its social licence to operate and responsible engagement with Indigenous Australia’ Owners’ (Joint Standing Committee on Northern Australia, 2020). One of the key lessons learnt by Rio Tinto has been the recognition that they put their social licence to operate in jeopardy by focussing on commercial gain ahead of ‘meaningful engagement with Traditional Owners’ (Joint Standing Committee on Northern Australia, 2020: 7). According to Recommendation 6.91 of the later *A Way Forward Report*:

.... These actions remind corporations that their social licence to operate and corporate ethical positions will affect how they are able to do business in the future – it will affect their investment prospects and return on investment. The same principles apply to other industries, particularly in the context of a transition to renewables, opening the way for them to learn from the mistakes of the mining boom and pay respect to the living heritage of Aboriginal and Torres Islander peoples.

Best-practice Standards - International

The idea of ‘meaningful engagement’ is encapsulated by the United Nations Declaration on the Rights of Indigenous Peoples, which was signed by Australia in 2007 (United Nations, 2008). Effective engagement with Aboriginal peoples can be underpinned by six inter-related principles:

- ▶ Acknowledging and understanding of the individual aspirations and unique circumstances of different people and groups.
- ▶ Building trust.
- ▶ Maintaining a respectful manner, that acknowledges the need for reciprocity.
- ▶ Effective communication.
- ▶ Ensuring informed consent.
- ▶ Sustaining the relationship.

Direct and sustained engagement process is the best approach when working with Aboriginal communities.

UN Declaration on the Rights of Indigenous People (UNDRIP)

The UN Declaration on the Rights of Indigenous People (UNDRIP) sets out the rights of Indigenous people around the world to set and pursue their own priorities for development, and to maintain and control their cultural heritage (United Nations, 2008) The key provisions relevant to mineral development in the Australian Context include Indigenous people having the right to:

- ▶ practice and revitalise their cultural traditions and customs, and states shall provide redress for cultural property taken without free, prior, and informed consent (Article 11)
- ▶ practice their spiritual and religious traditions, customs, and ceremonies, maintain sites, control ceremonial objects and repatriate human remain, and states shall seek to enable the access and/or repatriation of ceremonial objects and human remains (Article 12)

- ▶ maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions and intellectual property over such heritage, knowledge and culture, and states shall, in conjunction with Indigenous peoples, take effective measures to recognize and protect the exercise of these rights (Article 31)
- ▶ determine and develop priorities and strategies for the development or use of their lands or territories and other resources, and states shall consult and cooperate with Indigenous peoples in order to obtain their free and informed consent before the approval of any project affecting their lands, territories, and resources, provide effective mechanisms for redress for any adverse impact from such activities (Article 32)

A core principle of UNDRIP is the right of Indigenous people to make decisions about development proposals that have the potential to impact their land and culture from an informed position that is free from coercion, intimidation, or manipulation (Joint Standing Committee on Northern Australia, 2021). In order to uphold these principles, Free and Prior Informed Consent (FPIC) has been recognised as the best practice approach for engaging with Indigenous people when seeking consent for projects or activities that affect Indigenous people's culture or country (Kemp and Owen, 2014).

While the UNDRIP has not been formally adopted into Australian law, there has been an increasing recognition within industry of the importance of FPIC in building meaningful relationships with Traditional Owners and maintaining a social licence to operate. In addition, Mr Buti, the WA Aboriginal Affairs Minister, has indicated that 'new Act embedded consultation, due diligence, agreement making and **informed consent** within legislation' (as reported by Torre, 2022).

Free Prior and Informed Consent (FPIC)

In relation to cultural heritage and development, the UNDRIP means that Indigenous communities have a right to know, and make decisions about, projects that affect them and their heritage. The principles of Free, Prior and Informed Consent (FPIC) for Indigenous persons or communities in relation to development projects are a best practice standard to be applied. They protect and promote Indigenous Rights within the development process. The processes of FPIC should be ongoing throughout the life of the project. To break this down:

- ▶ **Free** - the process to be free of manipulation or coercion (including financial).
- ▶ **Prior** - the process occurring in advance of any activity associated with the decision being made and allowing time for traditional decision-making processes.
- ▶ **Informed** - objective, accurate, current, and easily understandable information.
- ▶ **Consent** - right to approve or reject a project (Hill, Lillywhite and Salmon, 2010).

UNESCO Convention for the Safeguarding of Intangible Cultural Heritage 2003

As noted in the 'Dhawura Ngilan'/Remembering Country visionary document (Heritage Chairs of Australia and New Zealand, 2020, pp. 38–39), intangible cultural heritage can exist independently of the association with a particular place. Thus, 'the management, protection and promotion of this form of cultural heritage can provide particular challenges in a legislative context'. Whilst this is understood, the HCOANZ group point to the importance of this manifestation of ACH as indicated by the number of international instruments, in addition to the UNDRIP, that address this topic. The 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO 2003) remains the key instrument in the recognition and protection of such cultural heritage; however, Australia has not yet

ratified it. Acknowledging the constitutional arrangements in Australia, the HCOANZ group support the development of national legislation for the recognition and protection of intangible ICH/ACH.

For the purposes of this Convention (UNESCO 2003: Appendix 2) ‘intangible cultural heritage’:

- ▶ means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.
- ▶ is manifested inter alia in the following domains:
 - (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage
 - (b) performing arts
 - (c) social practices, rituals and festive events
 - (d) knowledge and practices concerning nature and the universe
 - (e) traditional craftsmanship.

The AHA (Section 5 and Section 39 (2) and (3)) includes consideration of intangible cultural heritage values that are considered important to the Aboriginal people of the State, and are recognised through social, spiritual, historical, scientific or aesthetic values, as part of Aboriginal tradition. However, most forms of intangible cultural heritage, including oral traditions and rituals, are excluded unless they are associated with place.

Summary

A key result of the Parliamentary Inquiry into the destruction of Juukan Gorge was the reminder to corporations of their ‘social licence’ to operate. In relation to Aboriginal cultural heritage and tradition this means respect for Aboriginal people and meaningful engagement with them as set out by UNDRIP and underpinned by the principles of FPIC. These principles are reflected in both national and international best practice cultural heritage standards and codes.

The AHA’s Section 18 process came under criticism by that Inquiry, which commented that it ‘failed to strike a balance between the needs and aspirations of the various parties and has excessively favoured the interests of proponents (4.126). In commenting on the draft ACH Bill, the Committee supported the aspirations of the WA Government to strengthen Aboriginal voice in the management of ACH and in its efforts to seek a better balance between proponents and traditional owners (4.129). In noting concerns raised in consultation about the Bill, the Committee strongly urged the WA Government to incorporate the principles of FPIC in addressing the issues raised by Aboriginal groups as it progressed the new legislation (4.135).

The ACHA broadened the definition of Aboriginal cultural heritage and acknowledged Aboriginal people as its primary custodians and decision makers. It instituted a new tiered approvals process, based on the amount of ground disturbance. It promoted the role of Aboriginal people in managing harm to their heritage by requiring substantially more engagement with Aboriginal people by proponents at all stages of the approvals process. The establishment of the Aboriginal Cultural

Heritage Council (ACHC) and Local Aboriginal Cultural Heritage Services (LACHS) are based on the principle of self-determination.

The proposed amendments to the AHA, following the announcement to repeal the ACHA, attempt to address the criticisms of the Section 18 process by formally recognising the interests of Native Title holders, by extending the right of appeal to Aboriginal people, and by creating a more transparent process of decision-making timelines by the Minister. Increased involvement of Aboriginal people is addressed by replacing the ACHC with a new Aboriginal Heritage Committee, based on the composition of the ACHC established under the ACHA. These amendments may not adequately incorporate the principles of FPIC or meet the best practice standards recommended by the Parliamentary Inquiry. The onus is on proponents to meet best practice cultural heritage standards in order to avoid or limit any risks that may impact their social licence to operate.

Historic Heritage Legislation

WA Legislation

Heritage of Western Australia Act 1990 (repealed)

In July 2019, the *Heritage of Western Australia Act 1990* (the HWAA) was repealed and replaced by Heritage Act 2018. Any heritage agreements entered into under Section 29 of the HWAA that were in effect on the commencement day of the Heritage Act 2018 continue to have effect as if it were certified under the new legislation. The municipal heritage inventories that were compiled and maintained under the HWAA are still a maintained repository of information for local governments today. Indeed, the collation of local heritage information is still required under Part 8 of the *Heritage Act 2018*, now referred to as Local Heritage Surveys.

Heritage Act 2018

The purpose of the *Heritage Act 2018* (HA) is to recognise and promote WA cultural heritage by defining principles for conservation, use, development or adaptation for heritage places. In repealing the HWAA, the HA is the main legislative framework for historical heritage, sometimes referred to as European heritage, in the State.

The HA sets out processes for the management of the State Register of Heritage Places, including the establishment of a Heritage Council. The purposes of this Council include assessing places of significance, advising the Minister for Heritage, guiding public authorities on best practice, promoting public awareness and administration of the register of places. The Heritage Council of Western Australia is Western Australia's advisory body on heritage matters and focuses on places, buildings and archaeological sites, with a mission to provide for and encourage the conservation of places significant to the cultural heritage of WA under the jurisdiction of the HA.

The HA requires the keeping of a Register of Heritage Places for places that are protected by the provisions of the Act. Heritage places generally gain registration under the HA by being shown to be of cultural heritage significance or possessing special interest relating to or associated with cultural heritage. Section 38 outlines relevant factors in determining the significance of heritage places. This section uses definitions and values like those of the Burra Charter (see above): the Council are to consider values such as aesthetic, historical, scientific, social or spiritual, and characteristics such as fabric, setting, associations, use and meaning.

Places registered under the HA may also have Aboriginal heritage values listed within the significance statement.

Part 5 outlines the responsibilities of public authorities to consider heritage matters within development planning. Under Section 73 of the HA, public authorities must refer a development proposal to the Council when the proposed works have potential to impact a registered place. The advice provided by the Council in response to a referred proposal may consider the restoration, maintenance and interpretation of the heritage place in question.

Part 11 outlines the definitions and penalties for offences and contraventions of the Act. Under section 129 of the HA, unauthorised impact to registered heritage places is subject to penalty. Section 129 defines damage as including altering, demolishing, removing or despoiling any part of, or thing in, a registered place. The penalties for contravention of the Act are severe, including a \$1 million fine, imprisonment for one year and a daily penalty of \$50,000. Applications to develop, disturb or alter any place entered on the Register can be made under Part 5 Division 2 of the HA. The HA is currently administered by the Department of Planning, Lands and Heritage in Perth.

Planning and Development Act 2005

The purposes of the *Planning and Development Act 2005* (the PDA) are to consolidate the provisions of the Acts repealed by the Planning and Development (Consequential and Transitional Provisions) Act 2005 (i.e. the *Metropolitan Region Town Planning Scheme Act 1959*, the *Town Planning and Development Act 1928* and the *Western Australian Planning Commission Act 1985*). The PDA is intended to provide for an efficient and effective land use planning system in the State, as well as promoting the sustainable use and development of land in the State.

Under Section 73 of the *Heritage Act 2018*, any development proposal that is likely to affect a Registered place must be referred to the Heritage Council for its advice. Under Section 75 of the HA, it is important to comply with Heritage Council advice in order to not adversely affect a registered place.

Under the PD Act, the definition of development ‘includes the concept of physical development and the use of the land’⁶.

“Development means the development or use of any land, including – (a) any demolition, erection, construction, alteration of or addition to any building or structure on the land; (b) the carrying out on the land of any excavation or other works; in the case of a place to which a Conservation Order made under section 59 of the Heritage of Western Australia Act 1990 applies, any act or thing that – (i) is likely to change the character of that place or the external appearance of any building; or (ii) would constitute an irreversible alteration of the fabric or any building.”

⁶ [https://www.dplh.wa.gov.au/getmedia/475ca92d-87a9-45b9-9313-efe3684f6f70/Making-Good-Planning-Decisions-\(website-published\)-2](https://www.dplh.wa.gov.au/getmedia/475ca92d-87a9-45b9-9313-efe3684f6f70/Making-Good-Planning-Decisions-(website-published)-2)

Maritime and Underwater Heritage Legislation

WA Legislation

The Maritime Archaeology Act 1973 (WA)

The *Maritime Archaeology Act 1973* (MAA) was originally enacted to safeguard the State's historic shipwrecks and other maritime archaeological sites, and associated materials. The Western Australian Museum (WAM) is the regulator for the MAA, which protects pre-1900 maritime archaeological sites on State lands and in State waters, including protected bays, harbours, estuaries, rivers and creeks.

Section 4 of the MAA defines what constitutes a maritime archaeological site which may be located below the low water mark, between the tide marks or on land. Maritime archaeological site types include shipwrecks and relics associated with historic ships, early maritime infrastructure as well as terrestrial maritime archaeological sites such as jetties and shipwreck survivor camps. The term 'relic' pertains to anything of historic interest that appears to have formed part of, or to have been carried by, derived from or been associated with a historic ship. It is a legal requirement to report any site believed to be, or possible be, underwater cultural heritage to the WAM.

This Act defines a 'historic ship' as any ship that before the year 1900 was lost, wrecked, abandoned, or stranded on or off the coast of Western Australia. This fixed date means there is no provision for the protection of wrecks that occur after this date.

Application of the Maritime Archaeology Act 1973 (WA)

Currently, under the MAA, there is no permit system for the disturbance of UCH. Under **Section 8** of the MAA a person who without the consent of the Trustees in any way alters, removes, destroys, damages, or in any way deals with, or assumes the possession, custody, or control of, any maritime archaeological site, ship, relic or thing vested in the WAM commits an offence. Trustees means the Trustees of the Museum appointed pursuant to the *Museum Act 1969* and includes any person lawfully exercising the powers or performing the duties of the Trustees. Trustees' powers are outlined in Section 20 and 21 of the MAA:

20. Trustees' powers

(1) The property in or right to possession of any ship, relic or other thing of historical interest vested in the Museum on behalf of the Crown shall not be disposed of except in accordance with section 21 and a contract or agreement which purports to do so is void.

(2) Subject to subsection (1), the Trustees may —

(a) pay to a person, who at their request delivers to them any relic or thing of historical interest, the expenses properly incurred by him in recovering and obtaining possession of it;

(b) enter into an agreement for the recovery or partial recovery of any ship, relic, or thing of historical interest and expend such amount in that regard as is properly payable, based on a rate determined by the Trustees prior to the work of recovery being commenced;

(c) take such steps as may be necessary or desirable to recover, preserve or display any ship, relic or thing vested in the Museum; and (d) promote or supervise activities aimed at the discovery, recovery, preservation, study and display of ships, relics and things to which this Act applies, and any such payment, agreement or activity may be made subject to such prior conditions or requirements as the Trustees think fit.

21. Power of disposal

When the Trustees are satisfied that any relic has been preserved and has been examined and recorded, they may make a recommendation to the Governor that the relic should be disposed of to

—

(a) the Commonwealth, or any State or Territory of the Commonwealth, the body known as The National Trust of Australia (W.A.), or the body known as the Royal Western Australian Historical Society Incorporated;

(b) a person or body having historic associations with that relic; or (c) the finder, or a person who recovered or assisted in the recovery, of the relic, and if the Governor so directs the Trustees shall give effect to the recommendation.

Review of the Maritime Archaeology Act 1973

The MAA has become outdated due to the legislative developments of the 2018 *Underwater Cultural Heritage Act*, and it is not consistent with the protections offered by the 2001 Convention. As such, The Western Australian Government, through the WAM is proposing changes to the MAA to reflect changes in national legislation and international best practice.

Between 3 April and 31 August 2023, the WA Museum engaged in a public consultation campaign to inform stakeholders of proposed amendments to the MA Act, inviting feedback, responding to queries, and collating input to inform proposed amendments to the MA Act. A recurrent area of interest was the matter of the protection of submerged paleo-landscapes that are not automatically covered by the UCH Act and whether the amended MA Act would cover these landscapes.

Proposed changes to the MAA will, in certain cases, enable developments by permitting development activity subject to a satisfactory heritage outcome being reached. Where in situ preservation of a maritime archaeological site is not possible for economic or social reasons, a revised MAA will allow site disturbance subject to permit conditions for archaeological recording and conservation conditions being met. Currently, there is no permit system under the MAA.

The amendments will bring the MAA into line with the UCHA and legislation in other State jurisdictions. The legislative alignment will facilitate protection and planning around maritime archaeological sites' values by reducing current inconsistencies and anomalies.

Harmonisation of Commonwealth/State and Territory maritime heritage laws will aid public education and understanding of the rules around the protection of maritime archaeological sites. In this way, it will address outdated parameters relating to the threshold for the designation 'historic', as well as update penalties.

The changes to the MAA will meet Australia's commitment to ratify the UNESCO Convention, as per the 2010 Commonwealth, States and Territories *Australian Underwater Cultural Heritage Intergovernmental Agreement*. They will also improve the protection of bona fide maritime archaeological material that may fall between the geographic scope of the State and Commonwealth acts at the present time.

Consultation findings have been considered and are informing drafting instructions provided to the State Solicitors Office. Consultation will continue with other regulatory and heritage agencies where there is jurisdictional or regulatory overlap. At this stage, the timeline for the completion of the proposed reforms has not been made public.

Commonwealth Legislation

2001 UN Convention on the Protection of the Underwater Cultural Heritage 2001 (2001 UNESCO)

The 2001 UNESCO convention offers States Parties ‘common principles’ on safeguarding the underwater cultural heritage of humanity. “States Parties” means States which have consented to be bound by this Convention and for which this Convention is in force. Australia is not yet a State Party to the convention and progress toward ratification is contingent on all States and Territories updating legislation to reflect the intent of the convention.

The 2001 Convention aims to ensure and strengthen the protection of underwater cultural heritage. Under the 2001 Convention:

- (a) “Underwater cultural heritage” means all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years such as:
 - (i) sites, structures, buildings, artefacts and human remains, together with their archaeological and natural context;
 - (ii) vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, together with their archaeological and natural context; and
 - (iii) objects of prehistoric character.
- (b) Pipelines and cables placed on the seabed shall not be considered as underwater cultural heritage.
- (c) Installations other than pipelines and cables, placed on the seabed and still in use, shall not be considered as underwater cultural heritage.

In 2010 the Australian Underwater Cultural Heritage Intergovernmental Agreement (IGA) was signed by all States, the Northern Territory and the Commonwealth. All parties agreed to ensure State and Territory legislation conformed to meeting best practice as stated in the Annex Rules to the 2001 Convention and work toward ratification of the 2001 Convention. The Annex Rules (UNESCO, 2021) attached to the 2001 Convention form an integral part of it and, unless expressly provided otherwise, a reference to the 2001 Convention includes a reference to the Rules. Compliance with the Annex Rules to the 2001 Convention is an essential requirement for the issuing of permits to disturb UCH under the Commonwealth *Underwater Cultural Heritage Act 2018* and is expected to be the basis of any permit (to disturb UCH) process under the revised *Maritime Archaeology Act 1973 (WA)* (see below).

Recently there has been renewed Commonwealth government interest in working toward the ratification on the 2001 Convention, with a “Public Hearing on the Joint Standing Committee on Treaties Convention on the Protection of the Underwater Cultural Heritage” held on 10 February 2023, followed in March 2023 with a recommendation that “The Committee supports the Convention on the Protection of the Underwater Cultural Heritage and recommends that binding treaty action be taken”.

The Commonwealth Underwater Cultural Heritage Act 2018

The Commonwealth *Underwater Cultural Heritage Act 2018* (the UCHA) Act provides for the protection of Australia’s underwater cultural heritage. It came into effect 1st July 2019, replacing the *Historic Shipwrecks Act 1976*. The HMP Area is located within Western Australian state waters, and

so, is covered by the *Maritime Archaeology Act 1973* (WA). However, the state legislation is currently under review and the revised state legislation will be informed by the recently updated UCHA and the UCHA's draft guidelines. The revision of the *Maritime Archaeology Act 1973* (WA) will ensure both the Commonwealth UCHA and the revised state legislation align with the 2001 Convention and the Annex Rules attached to the 2001 Convention.

The UCHA protects shipwrecks, sunken aircraft and their associated artefacts, that occurred 75 or more years ago, regardless of whether their location is known. Other types of underwater heritage, and more recent shipwrecks or aircraft, may be protected through a declaration under the UCHA, and some underwater heritage sites may also have a protected zone around them.

The UCHA applies to all Australian waters, including coastal waters, beyond the seaward limits of the Australian states and includes the harbours and estuarine waters of the Northern Territory and Australia's external territories.

Other kinds of articles of underwater cultural heritage can be protected if the Minister of Environment is satisfied that they are of heritage significance. Such articles may be in Commonwealth waters, Australian waters or in waters beyond Australian waters, depending on the kind of article concerned. This includes submerged terrestrial (Aboriginal) sites. Some articles are, or can be, protected even if they have already been removed from those waters. In all cases, if an article is removed from waters after it becomes protected, the protection continues to apply to it.

Inspectors have powers to ensure compliance with the UCHA, to investigate non-compliance, and to enforce the UCHA. Enforcement mechanisms include infringement notices, enforceable undertakings and injunctions. The Minister maintains a register in relation to underwater cultural heritage. The register includes information relating to the location of known remains of vessels and other articles in waters, declarations that have been made and permits that have been granted, as well as other information.

Under the UCHA, any adverse impact to protected UCH is unacceptable, unless these impacts are mitigated and managed in accordance with the UCHA, the 2001 Convention and the Annex Rules. Activities of any kind that have the potential to impact protected UCH must comply with the requirements of the UCHA and, if applicable, any relevant state legislation.

Draft Guidelines for Working in The Near and Offshore Environment

The Commonwealth Department of Climate Change, Energy, the Environment and Water have prepared draft guidelines (DCCEEW, 2023) for working in the near and offshore environment to protect UCH which are aimed to provide direction regarding proponents' legislative obligations and to promote best practice for identifying, assessing, and protecting underwater cultural heritage in Australian waters. The UCHA applies the principle of 'no adverse impact without a permit'. Proponents who commence activities without undertaking an adequate UCH impact assessment process beforehand, expose themselves to a risk of non-compliance and extended timeframes. The overview in (Table 2) shows the key stages of how UCHA compliance may be achieved by proponents.

When undertaking actions in the marine environment, proponents and their contractors must adhere to all requirements of the UCHA including:

- ▶ Not taking actions that adversely impact on protected UCH without a permit, including shipwrecks and aircraft sites that were unknown or previously unlocated.

- ▶ Understanding the requirements of protected zones and obtaining a permit to enter or operate in a protected zone if it is required.
- ▶ Providing a notification in the Australasian Underwater Cultural Heritage Database (AUCHD) of the discovery of any suspected UCH identified, within 21 days of the discovery.

If a proposed activity will impact protected UCH, the proponent must apply for a permit under section 30 of the UCHA. All permits will be issued with conditions that align with the IGA, and the Annex Rules to the 2001 Convention. As such, proponents are advised to pay particular attention to project design, reporting and competence and qualifications requirements as specified in the Annex Rules.

An application may be submitted using the online form provided in the Australasian Underwater Cultural Heritage Database (AUCHD). Additional information may be required to assess a permit application such as an UCH impact assessment, a UCH management plan, or a project plan in line with the Annex Rules to the UNESCO 2001 Convention.

Table 2. Outline of UCHA statutory and document requirements for project planning and construction phases

Work stage	EPBC Act Referral stage	UCH management stage	UCH Act compliance activities		Statutory requirement	Document/s produced
1. Scoping and feasibility	Proposed action referred to DCCEEW, NOPSEMA, or Offshore Infrastructure Regulator.	Initial Assessment stage.	Undertake a desktop UCH assessment and propose a forward work program.		Nil**	UCH Desktop Assessment
2. Environmental planning	Proposed action assessed by Environmental Impact Statement or Environment Plan.	Full Assessment stage.	Undertake an adequate UCH survey*, describe the UCH resource and potential, perform an impact risk assessment, and propose appropriate mitigation measures.		Nil**	UCH Impact Assessment
3. Pre-work and construction	Residual risk management and reactive management stage.		Minimum Monitoring	As required	As required Apply for a Section 30 permit for: test excavations and unexpected discoveries, or impacts to known UCH	As required Permit Application: Archaeological Research Design, Archaeological Excavation Report Permit Application: UCH Management Plan Best practice UCH Management Plan
4. Operation maintenance and decommission			UCH inductions for staff	Archaeological investigation Relocation and reburial		
<p>*UCH survey expectations will vary depending on the environment that could be impacted by a proposed activity, the archaeological potential of the environment and the scope of the proposed activity. UCH survey may require a combination of: multibeam echo sounder, side scan sonar, magnetic gradiometry survey data and sub-bottom profiler data gathered in resolutions appropriate for the identification of UCH sites and interpreted by a maritime archaeologist. UCH survey may also require visual inspection of anomalies through diver or ROV surveys to identify potential UCH.</p> <p>**Entry into or underwater activity within UCH protected zones requires permitting under the Act.</p>						

Draft Guidelines for Archaeological Assessment of First Nations Underwater Cultural Heritage

There are now published (draft) technical guidelines on the archaeological assessment of First Nations underwater cultural heritage in commonwealth waters (DCCEEW, 2024). These technical guidelines set out a minimum standard framework for the archaeological assessment and management of First Nations underwater cultural heritage (UCH) in Commonwealth waters to assist proponents and consultants to meet the requirements of the *Underwater Cultural Heritage Act 2018* (UCH Act). Whilst these technical guidelines provide information specific to the jurisdiction of the UCH Act, they are based on internationally recognised UCH best practice principles and can serve as a useful reference document for proponents and UCH practitioners working within other regulatory frameworks such as State and Local Government, where the archaeology of human occupation on submerged palaeolandscapes is a consideration (DCCEEW, 2024). In concert with the DCCEEW's general guidelines on UCH management (DCCEEW, 2023), it is recommended that the process of undertaking a First Nations UCH archaeological assessment is broken down into three main stages (Figure 3):

1. First Nations UCH desktop due diligence assessment;
2. First Nations UCH archaeological impact assessment; and
3. First Nations UCH management plan.

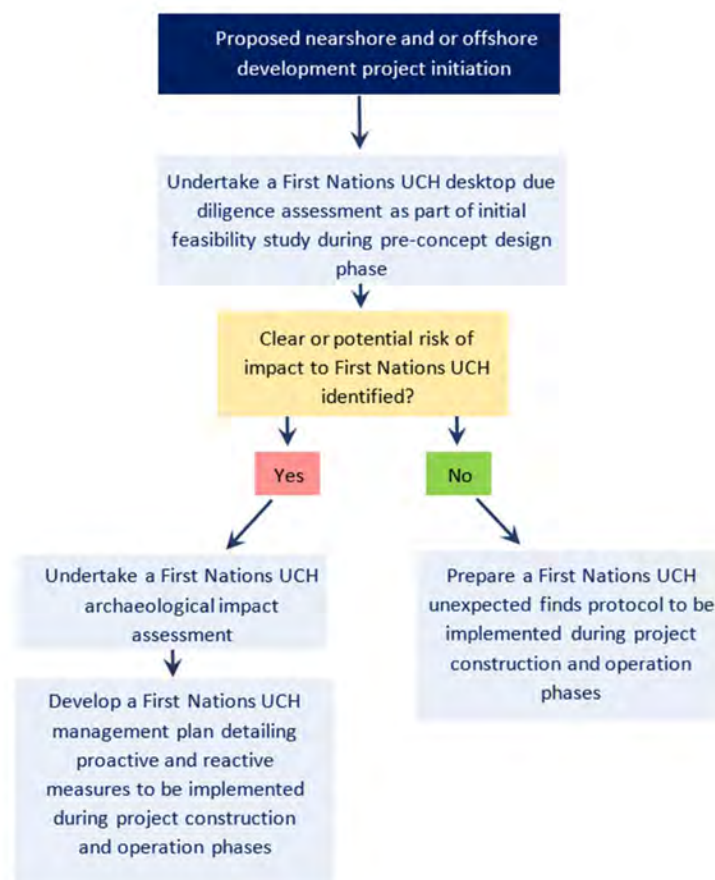


Figure 3. Recommended process of First Nations UCH archaeological assessment (DCCEEW, 2024)

Definition of a maritime archaeological site under a revised Maritime Archaeology Act

Under a revised MAA a maritime archaeological site will mean a site which contains any trace of human existence that has a cultural, historical or archaeological character; that has been situated on or within the land, or is situated partially or totally, whether periodically or continuously, underwater for at least 75 years or specially declared by the Minister and does not have cultural heritage significance solely on account of its connection with Aboriginal tradition or culture.

For the purpose of this definition, maritime archaeological sites may be:

- ▶ Underwater cultural heritage, or
- ▶ Terrestrial archaeological sites.

Underwater cultural heritage means any trace of human existence that has a cultural, historical, or archaeological character and is situated partially or totally, and whether periodically or continuously underwater for at least 75 years, or specially declared by the Minister. For this definition, a “trace of human existence” includes:

- ▶ Sites, structures, artefacts and human and animal remains, together with their archaeological and natural context.
- ▶ Vessels, aircraft and other vehicles or any part thereof, together with their archaeological and natural context.
- ▶ Artefacts associated with vessels, aircraft, or other vehicles, together with their archaeological and natural context.
- ▶ Abandoned cables and pipelines.

Terrestrial archaeological site means any trace of human existence that has a cultural, historical or archaeological character and is associated with a vessel that was navigated, lost, wrecked, abandoned or stranded on or off the Western Australian coast. For this definition, a “trace of human existence” includes:

- ▶ Sites, camps, fortifications, structures, artefacts and human and animal remains, together with their archaeological and natural context.
- ▶ Vessels or any part thereof, together with their archaeological and natural context.
- ▶ Artefacts associated with vessels, together with their archaeological and natural context.

Vessel means any kind of vessel used in navigation by water, however propelled or moved that was navigated, lost, wrecked, stranded or abandoned, on or off the coast of Western Australia more than 75 years ago, or specially declared by the Minister.

Artefact means anything of historic interest that appears to have formed part of, or to have been carried by or derived from or associated with any maritime archaeological site, or to have been constructed, modified, or used by any person associated with any such maritime archaeological site.

SECTION TWO – BACKGROUND

ETHNOGRAPHIC BACKGROUND

Thalanyji

Ngurrunyjarri wanggayin garndaganyjibarndi, Ngaguwarra ngarrarigu, ngarrari ngaguwarra nyindama.

From way back, old people tell us, look after country, and country will look after you.

These words in the Thalanyji language typify the balanced and reciprocal nature of the Thalanyji people's relationship to the land and cultural heritage. Prior to colonisation, the Thalanyji had exclusive rights to their country, including the right to possess and occupy their country and waters, travel over it, use, share and trade its resources. Stewardship and custodianship of Thalanyji country implied a reciprocal obligation associated with rights of access and land use. As Sutton remarked, Stewardship refers to "the care for and maintenance of different aspects of the country, including its supernatural powers, knowledge of it, religious enactments or objects that relate to it, and physical care as well" (Sutton, no date).

Today, despite the existence of extensive pastoral leases, land excisions, and reserves with overlapping non-exclusive Native Title rights, a large part of this traditional stewardship with respect to Thalanyji country includes the role of senior, knowledgeable custodians mentoring and supporting younger Thalanyji members to learn and pass on the cultural knowledge that is needed to look after cultural heritage sites and fulfill the obligations passed on through generations.

Although the spelling and conventions associated with recording place names and Thalanyji traditions may have changed in the past, the Thalanyji connection to the land was recorded by several ethnographers from the late nineteenth century onwards (e.g., Bates, 1985; Radcliffe-Brown, 1913). Dixon (Dixon, 1980), an Australian linguist, uses the spelling *Dhalandji*, although the preferred convention today is to use the Th form in reference to the people; the point being that the D and T were considered interchangeable and reflect the tongue striking the upper palate near the top of the teeth when speaking. Today we use the Thalanyji spelling, like the form Bates and Radcliffe-Brown used at the turn of the last century.

Linguistically, the local language belongs to the *Kanyara* group of languages within the broader *Pama-Nyungan* language classification of languages developed by Australian linguists (Dixon, 1980). Bates (1985:57) reported that the *Thallainji* or *Tallainji* [Thalanyji] was a coastal tribe occupying the country between the mouths of the Ashburton and Lyndon Rivers. Her map of tribal territories from c.1907 – 09 shows Thalanyji country as including Northwest Cape and inland areas as far as Yanrey Station and Barradale (see Underwood 2003, map #8). Similarly, Radcliffe-Brown (1913: 146) reported that Thalanyji country is 'on the coast at North-West Cape and inland on the Ashburton River'. His map shows the language group occupying the same general area as Bates though extending to Nanutarra and Mount Alexander. Other sources online [Kanyara languages – Wangka Maya Pilbara Aboriginal Language Centre] indicate the Thalanyji language was spoken in the region between the mouths of

the Gascoyne River and the Ashburton River, along the coast and extending inland. This reinforces the extensive nature of cultural and linguistic movement between peoples in the pre-contact period, between the coast and drier inland areas.

McDonald and Phillips (2021: 13) note in their recent ethnographic reports that Tindale identified the *Talandji* (Thalanyji) only on the east side of Exmouth Gulf, although not on the Gulf shores itself, and extending inland around the Ashburton River:

Along the Ashburton River from the coast to Nanutarra, Boolaloo, and the lower Henry River. ... Their extension to the coast at Exmouth Gulf is probably all due to late migration.

... An ultimate water supply base on the coast was an offshore freshwater spring or springs at [‘Pi: Itan], now within the township area of Onslow (Tindale, 1974:256).

According to a publication by the Wangka Maya Pilbara Aboriginal Language Centre (2008:9), contemporary Thalanyji territory extends:

... Along the coast south of Onslow to Tubridji Point then south-west across to the Yanarrie River. It follows the river upstream until Emu Creek on Nyang Station. then east to Bangoola pool on the Henry River. It crosses the Ashburton River and continues a short distance up the Hardey River, then extends north-west along the Cane River to the ocean (Wangka Mia Pilbara Aboriginal Language Centre, 2008).

Tindale (1974) located several Aboriginal groups neighbouring the Talandji including the Noala (Nhuwala) and Jadira to the northeast, the Binigura (Pinikura) to the east and the Buruna (Purduna) to the south (see also Underwood, 2003). However, Tindale’s identification of the Jadira also appears to be problematic as Dench (1987: 6-7) presents evidence to show that the Jadira are not a separate tribal/linguistic entity but rather a local residence group (band) on the Cane River (Yarti/Jardi). As far as can be ascertained, there are now no persons who are identified as Nhuwala and certainly closer than Tindale’s earlier brief ethnographic description. This discrepancy simply reflects the fact that Tindale’s work did not involve the kind of detailed ethnographic and linguistic mapping required to accurately map and record the complex overlapping rights and interests Thalanyji have in relation to land and areas of cultural significance. Moreover, the traditional social and territorial organization was designed in a way that maximised survival in sometimes harsh and unpredictable environmental conditions, making mobility over long distances between the coast and interior an important feature of traditional hunter-gatherer life. This movement continued in the post-contact period, reflected in sites now registered as being of cultural significance for the purposes of heritage protection.

As McDonald and Phillips emphasise (2021: 13), Parker (in Olive (ed.), 1997: 125) notes that the Panyjima and other Hamersley Range people, on moving to Onslow in the 1960s, commenced ceremonies at Cane River and that to do this:

They all got together and talked with the elders from here, like old Jack Hayes [father of the senior Thalanyji representatives, Albert and Les Hayes]. They're from the Dhalanyji [Thalanyji] group, they're the traditional owners of this Onslow area. They had to get his permission to have ceremonies on Dhalanyji land.

The ethnohistorical sources strongly suggests that the coastal groups could generally be regarded as 'river people' whose settlement/subsistence patterns were tied closely to the drainage features, water sources and rainfall patterns of the area. These settlement/subsistence patterns would seem to have involved small, mobile family groups:

...it should be borne in mind that the natives live in families at various intervals of a few miles down the course of each river and its creeks, while some journey down, others go up to the next waters; in fact, they are small families constantly moving camp a few miles in any direction they please.

...the natives have no permanent place of habitation, and only stay a few days at each waterhole. They, however, do not go far off the rivers, and by means of this frequent moving about they get game more readily (Withnell 1901: 16-17 cited in Murphy and McDonald, 2003: 18).

Bibindji (Peepingee) pool is a site of regional significance on the Ashburton River. It was here that major rain-making rites were performed and attended by people from various parts of Thalanyji country, including from Wogula and Kanmara and from other language groups. Radcliffe-Brown (1913) described Bibindji country as being on the edge of the coastal plain and comprising "small rocky granite hills and places with gum trees", and the "river [is] running between high banks" (Radcliffe-Brown 1913). The rock pool and sacred site are on the Ashburton River (Mindurru).

The Dreaming and the Law

The Dreaming is central to Thalanyji culture and people, referring to a complex set of beliefs and behaviours that embrace the creative past and intertwine it with the present and future. The Dreaming is key to understanding the need to maintain culture and spiritual health is the idea that it is dangerous to neglect the Law, and potentially deadly, to not look after the sacred country and sites. They need maintenance and protection.

On Thalanyji country and elsewhere in Western Australia, the Tjukurrpa (or Dreaming) is viewed as a Law that manifests in a person's health and well-being, to the extent that custodians are concerned for the welfare of others who may not be safe when they visit a sacred site and don't follow proper protocols; usually because they don't know how to act or behave in an appropriate way or to conduct

rites necessary for the health and well-being of all. Following the rules in this sense is not an option, it is an imperative that links everyone to the creative period when many features of the land were formed by ancestral beings. This is common across many Aboriginal groups.

Where fresh water was abundant, the archaeological sites are numerous and typically more common. Like people from the desert interior, Thalanyji people held large gatherings at reliable water holes along river systems, usually involving people from neighbouring groups, to perform ceremonies based on songlines [*jalurra*]. In drier inland areas near smaller water sources, the archaeological evidence is of smaller artefact scatters, indicating small family groups travelling between the major rivers and catchments, such as the Ashburton and Cane Rivers (Hook, 2014).

Thalanyji Dreaming is intrinsically connected to the area that is now known as Onslow. There are a number of ethnographic and culturally significant Aboriginal heritage sites that have been recorded that form the cultural landscape that is significant to Thalanyji (see Previous Heritage Assessments below).

*Ganyaranyjarri nyinabaja nhamu ngarrarila thagalgarra gayulugu, thanwa
bajarriyarr nhigirndarriyarratharra.*

Burrabalayji is a significant site, located near the Sunset Beach. Was also an old camping ground for the Thalanyji and Nhuwala people in the early days. They got fresh water from the soak and hunted around that area for animals and shellfish. (Wangka Mia Pilbara Aboriginal Language Centre, 2024)

Burubarladji is a mythological site where the Creationary being *Warnamankura*, the water snake, shaped the earth and waters. It was recorded that the 'Warnamankura travels underground and creates a number of yinta (also jinta) or soaks in the Onslow area' (Archae-aus, 2021). Another example of the Dreaming embedded in the cultural landscape of Onslow is the Dew Talu, which is a water source and ceremonial site located on the offshore island, Twin Island. The soak is said to be connected to another soak located inland on Lot 300 (within 8920 Onslow 1) via an undersea 'tunnel' or 'hole' (Archae-aus, 2021). These two soaks share the same name, Dew Talu. The site is connected to Burubarladji and the soak at 8920 Onslow 1, among other Onslow water sources that are all used by water snake Wanamankura for travel between locations underground (Archae-aus, 2021).

Post Contact History

The Thalanyji people's post contact experience is as diverse and complex as most Aboriginal post settlement histories in Australia. While not always well documented, it includes the worst excesses of colonisation; the skirmishes, the resistance to white settlement and impositions, the resulting deaths and, above all, determined attempts on the part of the Thalanyji people to maintain responsibility for and access to cultural sites of significance in the face of overwhelming force and pressures from settlers.

This history includes the establishment of cattle and pastoral stations and use of precious water resources for settlement and agriculture, with little regard for Aboriginal people's cultural heritage or needs; forcing Aboriginal people to work for rations before wages were introduced or abuse of limited food and sacred water sources. The impact of establishment of missions and the negative impacts of

settler and government actions and policies since first settlement are well documented. For example, Aboriginal people from all around the Pilbara were captured and forced to work on pearling boats off the coast; unprecedented powers over Aboriginal people were granted to the Chief Protector under the *Aborigines Act 1905* and there were many on-going attempts to isolate, assimilate and control Thalanyji people's movements. Throughout this post-contact history, Aboriginal people worked hard to protect and hang on to their traditional way of life.

By 1869, there was extensive resistance to colonisation, resulting in punitive missions and skirmishes killing Aboriginal people. The resulting episode of frontier conflict was dubbed the Battle of Minderoo (Ref Minderoo Station - Wikipedia):

A poem was written about the battle, which described it as "fierce, with casualties and woes", but the result was a massacre of Indigenous people with little wounding of the British combatants. Despite their victory in the conflict, Hooley had to abandon the property not long after, due to continued Aboriginal resistance.

The property wasn't taken up again until the Forrest brothers secured the leasehold in 1878. David Forrest was the initial manager, and the property was owned by his brothers, John and Alexander Forrest, along with Septimus Burt. Minderoo was owned by the Forrest family until it was sold in 1998 by Donald Forrest due to relentless drought and debt. Donald's son, Andrew Forrest, whose early years were spent as a jackaroo at Minderoo, bought the property in 2009. After buying back Minderoo in 2009, Andrew Forrest hired Phil Clark to manage the property. Clark reduced the herd size from 11,000 to 3,500 head of cattle to give the land a chance to regenerate. A small weir was also installed on the Ashburton for the station's water supply.

What is clear from these cursory historical accounts is that there was a history of dispossession and conflict between early European settlers and Aboriginal people that had many negative impacts on Aboriginal culture, language, and heritage. While a detailed desktop assessment or ethnohistorical assessment of the impact of pastoralism and missionisation on the Thalanyji people in the post contact period would have been useful for this survey, time limitations do not allow a more extensive assessment of key dates and events associated with the establishment of the three pastoral stations: at Minderoo, Nanutarra and Uaroo. Suffice to say that Minderoo was initially formed by E.T. Hooley, who was given the pastoral lease in 1867 by the colonial Government of Western Australia as a reward for creating a stock route from Perth to Roebourne.

In the native title era since 1996 and through to 18th September 2008 when the Federal Court granted BTAC Native Title over 11,120 sq. kms, the Thalanyji purchased or established several small enterprises and cattle stations to maintain Aboriginal engagement with the pastoral and mining industry, as well as working hard to protect and preserve important heritage sites within the Native Title claim area. Plans for future cultural mapping and more extensive heritage work are envisaged in future to help BTAC identify risks to sites and develop strategies with its partners to manage and restore sites of significance under the terms of existing heritage agreements and legislation designed to protect Aboriginal heritage.

ARCHAEOLOGICAL BACKGROUND

The Project Area is on the Northwest coast within the Pilbara and Ashburton regions. Archaeological excavations conducted along Australia's northwest coast have revealed a sequence of Aboriginal occupation that dates from the Late Pleistocene, around 50,000 years ago (Morse, 1993; Przywolnik, 2002; Veth, 1993; Veth et al., 2007; Veth, Ditchfield, and Hook, 2014). Much research in northwest archaeological studies has focused on the timing of economic shellfish exploitation and the extent to which changes in species reflect either cultural preference or coastal productivity (Veitch and Warren, 1992). Changes in the exploitation patterns of shellfish species occurred about 3,000-4,000 BP on the Burrup Peninsular and Abydos Plain which saw a shift from *Terebralia* spp. (mud whelk), a mangrove shell species; to the mudflat shell species *Tegillarca granosa* (ark shell) (Vinnicombe, 1987); (P. M. Veth and O'Brien, 1986); (Lorblanchet and Jones, 1979). A similar occurrence was seen at Shark Bay where *Terebralia* spp. (giant mangrove whelk) was no longer present in the archaeological record by the mid-Holocene (Bowdler, 1990). Archaeological excavations on the Onslow coastline have indicated that the exploitation of mangrove systems was present by about 4,640 ±220 BP and had ceased by about 1,040 ±70 BP (Veitch and Warren, 1992). However, the evidence for a change in marine shell exploitation as argued for other parts of the Pilbara coast was not as clearly evident in these excavations.

In the Onslow region shell middens / scatters show distinct variation in their composition, correlating to landscape type (Mulvaney, 1984; Quartermaine Consultants, 1998; Veitch and Hook, 1993; Veitch and Warren, 1992). Scatters on Pleistocene dunes to the south of the mudflats are characterised by large numbers of *Terebralia* spp. shells. In contrast, scatters at the base of Holocene dunes along the coastline are characterised by a range of shell species including *Tegillarca granosa*, *Hyotissa hyotis* (oyster), *Terebralia* spp., *Telescopium* spp. (mud whelk) and *Melo* spp. (baler) (Veitch and Hook, 1993; Veitch and Warren, 1992). In 2013 surface samples of shellfish were collected from 12 sites near Onslow (Hook, 2014). The radiocarbon dates show a slightly different pattern to that observed by Veitch and Warren (1992). The exploitation of the coral dwelling oyster (*Hyotissa* spp.) occurs between 5,993 cal BP while, in contrast, the *Terebralia* spp. dates are younger, with *Anadara* spp. dated between 4,518 cal BP and 551 cal BP (Veth, Ditchfield, and Hook, 2014).

Traditional Land Use

Results from archaeological research and previous cultural heritage work along Australia's northwest coast and its hinterland provide a data set on which to build an understanding of the Thalanyji people's ancestors past use of the landscape. This is an essential component in understanding and interpreting the results of the current archaeological survey. Archae-aus has compiled the results of over 20 Aboriginal heritage surveys with details of almost 700 Aboriginal sites from the northwest coastal area, primarily comprising work from around Onslow and Cape Preston (Hook and Veitch, 2004).

The results of previous archaeological works in the region show a predominance of open stone artefact scatters; with numerous middens / shell scatters, reduction areas, quarries, and sites with grinding material; occasional rock shelters and rock art sites and small numbers of structures, burials, water sources, scarred trees, historical / maritime sites, and ceremonial places (see Appendix Two). The majority (81%) of the sites in the sample include a stone artefact scatter component, with lesser numbers comprising middens / shell scatters (22%) and grindstones (13%). By analysing the sample results in conjunction with data from the DPLH Register of Aboriginal Sites, it is possible to produce a basic predictive model of archaeological site location for the Onslow coastal area.

Table 3. Occurrence of Archaeological Site Types in the Onslow Coastal Area

Landscape Type	Site Type	Relative Archaeological Sensitivity	References
Coastal dunes (Holocene)	Medium to large shell and artefact scatters Burials	High	(Kee and Mulvaney, 1984; Veth, Strawbridge and Moore, 1990; Veitch, Hook and Greenfeld, 1993; Quartermaine Consultants, 1998)
Coastal dunes (Pleistocene)	Small shell scatters (<i>Terebralia</i> spp. dominant) with some flaked stone artefact component	Moderate	(Veitch, Hook and Greenfeld, 1993; Quartermaine Consultants, 1998)
Mud/Salt flats (tidal)	Small shell and artefact scatters, Occasional isolated artefacts	Very Low	(Kee and Mulvaney, 1984; Veitch, Hook and Greenfeld, 1993; Quartermaine Consultants, 1998)
Clay pans	Small to medium-size artefact and shell scatters	Moderate	(Veth, Strawbridge and Moore, 1990; Veitch, Hook and Greenfeld, 1993)
Inland sand plains	Small artefact scatters (usually task-specific), Isolated artefacts	Low	(Veth, Strawbridge and Moore, 1990)
Major river systems	Medium to large artefact scatters, repeated isolated artefacts	Moderate	(Kee and Mulvaney, 1984; Veth, Strawbridge and Moore, 1990; Quartermaine Consultants, 1998)
Smaller drainage lines	Small to medium artefact scatters	Low	(Veth, Strawbridge and Moore, 1990)
Coastal dunes (Holocene)	Medium to large shell and artefact scatters Burials	High	(Kee and Mulvaney, 1984; Veth, Strawbridge and Moore, 1990; Veitch, Hook and Greenfeld, 1993; Quartermaine Consultants, 1998)

While there are a number of archaeological variables to consider in interpreting these results (such as taphonomy and the selection of areas to survey), site distribution is believed to reflect a varied use of the landscape by the Thalanyji people's ancestors in response to changing environmental and social pressures. People would have primarily moved through the landscape in small groups, forming larger groups periodically at better watered places.

During the different phases of movement through the landscape, Aboriginal people undertook different activities which are sometimes visible in the archaeological record. During times of high mobility, when people were dispersed in small groups, occupations tended to be brief - resulting in smaller archaeological assemblages focused on expedient stone knapping. Conversely, during the periodic gatherings at well-resourced places, people congregated for longer, resulting in a wider range of stone types knapped, later stage stone reduction and an increase in the number of formal tools discarded. This model for understanding past Aboriginal use of the landscape is a very broad approach that does not consider many aspects of past life (such as ritual obligations, trade networks and the use of quarries).

Predictions made by Hook & Veitch (2004) relating to archaeological site location in the Onslow area state the following:

- ▶ The largest shell and stone artefact scatters are located in coastal sand dunes like those of the Project Area.
- ▶ Burials are more likely to be encountered in coastal dunes than any other landscape type. The presence of burials in this landscape unit makes it a high archaeologically sensitive area. The Project Area is a coastal dune system and therefore is a high-risk area for sub-surface burials.
- ▶ Clay pans have a high number of previously recorded artefact and shell scatters, although sites are generally smaller in size than those recorded in the sand dunes. This landform does not occur in the Project Area.
- ▶ Mud flats represent the lowest relative risk in regard to encountering archaeological sites, and those that have been recorded tend to be smaller and potentially less archaeologically significant than sites encountered in other landscape units. This landform does not occur in the Project Area.

Submerged Cultural Landscapes

The offshore component of the Project area is situated on the Northwest Shelf. There are four physiographic regions on the Northwest Shelf which are defined according to water depth and the geomorphic provinces they contain: the inner shelf; middle shelf; outer shelf/slope; and abyssal plain/deep ocean floor. The Project Area is located within the inner shelf; the inner shelf refers to the areas of the shelf that are between approximately 0-30 m depth and are characterised by high water turbidity year-round (Baker *et al.*, 2008). An understanding of the environmental conditions that characterise this area is vital to identifying areas that have the potential for submerged Aboriginal archaeological sites to have been preserved.

The principal physical processes acting on the Northwest Shelf are currents, 'internal tides, swell waves, large tides and monsoonal cyclones' (Baker *et al.*, 2008: 21). The region features semi-diurnal tides that increase from south to north along the shelf. For example, tides at Exmouth are 1.8 m and increase up to 10.5 m in the northern Collier Bay. Baker *et al.* (2008) describes how these oceanographic processes contribute to the regulation of sediment transport across the Northwest Shelf. Tropical cyclone events, in particular, can cause significant sediment movement and deposition. Tides, waves and currents also affect the transportation of sediment across the shelf. The Northwest Shelf is bathymetrically diverse, with a variety of geomorphic features including, slopes, rises, banks, basins, reef, ridges, pinnacles, and terraces (Baker *et al.*, 2008: 46–47). These features may represent submerged palaeolandforms which formed when the shelf was subaerially exposed.

The sedimentology of the southern inner shelf is characterised by sand, comprising skeletal fragments and lithoclasts, and is influenced by outflow of terrigenous sediment adjacent to rivers. The region is a zone of sediment bypass and winnowing rather than one of active deposition (Baker *et al.*, 2008). Proximity to rivers determines the impact of terrigenous sedimentation, which is generally low, but can reach as high as 30-60% when near to major rivers such as the Gascoyne River. Baker *et al.* (2008: 36) identify how 'sediment transport and deposition is [also] influenced by the coastal turbidity zone which results in the trapping and suspension of fine terrigenous sediments in close proximity to the coast.' The current distribution of seabed sediments on the Northwest Shelf reflects the late Quaternary evolution of the region, specifically, the changes to sea level and shoreline position resulting from deglaciation.

Sea Level and Climate

Over the Quaternary period (the last 2.6 million years) cyclic changes in climate between glacial (cold) and interglacial (warm) periods mean global sea levels have varied. Over a single glacial-interglacial

cycle, sea levels fall to a maximum of 120-125 m below the present-day sea level over a period of ~100,000 years, and then subsequently rise as ice sheets melt over a period of ~20,000 years (Lambeck *et al.* 2014). The sea-level curve of Lambeck *et al.* (2014), resampled in Brooke *et al.* (2017), covers the time from 125,000 years to the present day, which is the last glacial-interglacial cycle and covers the period of known inhabitation of the region surrounding the Project Area. However, Relative Sea Level (RSL) changes at specific locations are controlled by a mixture of near- and far-field sources and, as such, the actual timing and magnitude of sea-level change in the Project Area may therefore vary slightly from the curve presented by Brooke *et al.* (2017) (see Figure 4).

Brooke *et al.* (2017) assessment of sea-level data demonstrates that sea-level was most frequently between 30-40 m below present levels throughout the Late Quaternary (from c.128,000 – c. 12,000 BP), with six episodes totalling 19,000 years. Secondary modes are the depth intervals of 70–80 m (18 ka total duration) and 80–90 m below present (16,000 years duration). During the Last Glacial Maximum (approximately 20,000 years ago), sea levels dropped to approximately 125 m below present levels. These depths may represent the positions of former stable coastlines (Figure 4).

During periods of lower sea level, Aboriginal people would have had access to an emergent coastal plain with an arid climate and covered in savannah vegetation (Baker *et al.*, 2008, p. 24). Evidence of access to this sandplain is provided by several sites located on Barrow Island, such as Boodie Cave and John Wayne Country Rockshelter (Veth *et al.*, 2017; Ward *et al.*, 2017; Ditchfield *et al.*, 2018; Demuro *et al.*, 2019; Hook *et al.*, 2024). Boodie Cave is dated 51,000 years ago and provides the oldest archaeological evidence in the Pilbara. As the sea level and climate changed, people would have inhabited different parts of the subaerial shelf, gradually moving westward until the shoreline stabilised in its current position around 6,000 years ago (Figure 5).



Figure 4. 'Sea-level curves and estimates of the duration of specific sea levels for the Late Quaternary. A and B: Sea-level curves for the last 35 ka ... The main discrepancies are at around 20 ka, the Last Glacial Maximum lowstand, and the rate of rise in sea level following the LGM. However, given the uncertainties in the datasets ($\sim \pm 6$ m), the curves are similar. C: A composite relative sea-level curve and 10 m binned sea-level curve for the last 130 ka' (Brooke, 2017)

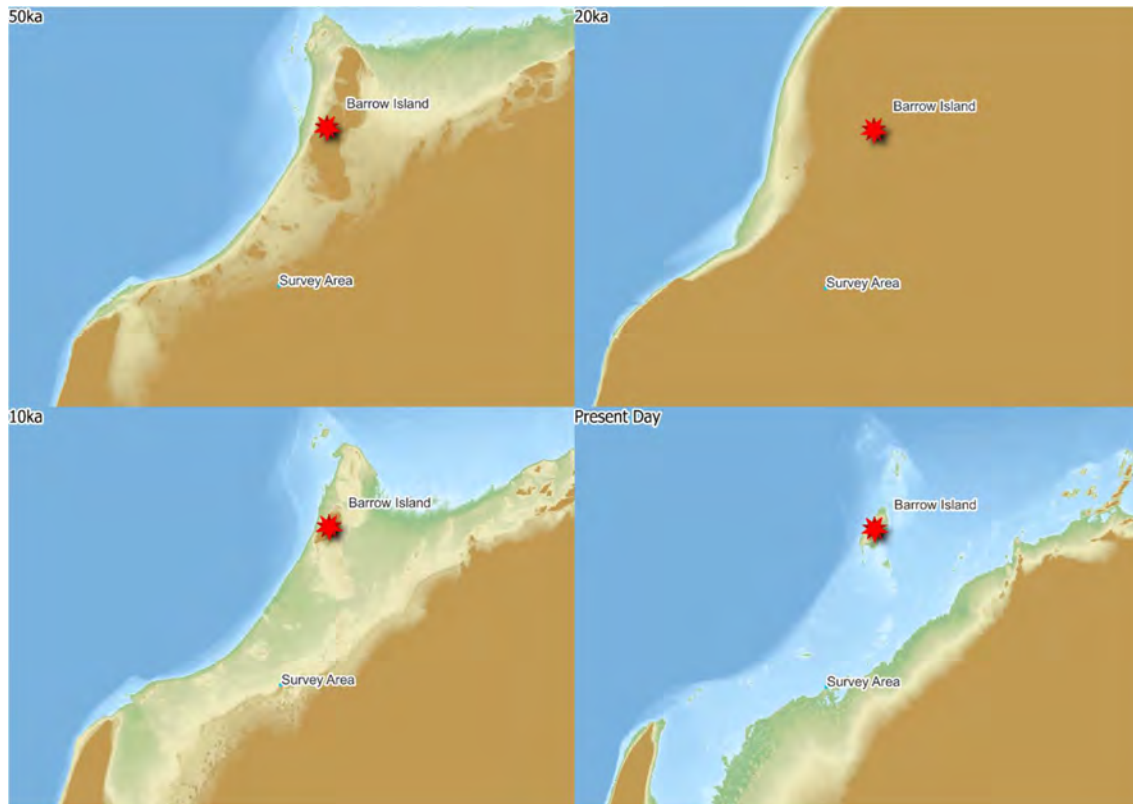


Figure 5. Approximate shoreline position and subaerial landscape at different sea-level depths. At 50 thousand years ago (ka), aligning with the earliest occupation dates in the Southwest, sea levels were approximately 50 m lower than present-day levels and Barrow Island was near to the coastline. 20 ka, during the Last Glacial Maximum, sea level was approximately 130 m lower than present-day levels and Barrow Island was positioned further inland. 10 ka, at the beginning of the Holocene, sea level was approximately 30 m lower than present-day levels. The final insert displays present day sea level and shoreline position

Approximately 51,000 years ago, Boodie Cave was situated 20km from the coast. Archaeological evidence shows that the people who camped there at that time stopped at the Boodie Cave on their way back from the coast, leaving behind cooked shellfish and knives made from shell. The climate was cooler than today, but there was more available water across the landscape. Large lakes and the large rivers, such as the Fortescue and the Ashburton, would have been corridors for people to follow inland.

From about 30,000 years ago, the world began to cool. At the north and south poles the ice sheets grew larger and in Australia the climate became cooler and much drier. The large lakes dried up and people had to change their way of life. Life in the desert would have become very difficult. In the Pilbara, people probably moved camp more often and had to try new foods as it became harder to hunt and find plant foods. Boodie Cave wasn't visited during this time.

The period 22,000 to 17,000 years ago, referred to as the Last Glacial Maximum (LGM), particularly cold and ice sheets covered large areas of Europe and Asia. Fresh water in the Pilbara likely became scarce, making occupation during this time difficult. Only a few Pilbara rock shelters, like Yirra in Paraburdoo, have traces of people living in them during the LGM. Boodie Cave was revisited again after 18,000 with people again carrying with them live shellfish and shell knives. On Barrow Island John Wayne Country Rockshelter was used for the first time.

The climate warmed slowly from about 17,000 years ago, causing ice sheets to melt and sea levels to rise. As water sources increased, people returned to parts of Country that they had to abandon during the LGM. Between 13,000 and 6,000 years ago, the climate became warmer and wetter and by about 10,000 years ago, it was warmer and wetter than it is today. Sea levels stabilised approximately 6,000 years ago, with Barrow Island separated from the mainland. This created new opportunities for people as new coastal environments formed. It is around this time, as coastlines stabilised, that shell middens appear in the archaeological record.

From about 6,000 to about 1,500 years ago, the climate became unstable as many of the important weather systems that affect us today were established. There was a particularly dry period 4,000 to 2,000 years ago. Across Australia, this was a time of great change. Technological developments and new subsistence strategies were invented in order to adapt to the changing environmental conditions. Understanding this history of regional occupation and its associated archaeological record can inform our understanding of the now submerged landscape that people would have occupied during periods of lower sea level. Combined with an understanding of the offshore environment and terrestrial site-location patterning it is possible for submerged Aboriginal archaeological sites to be identified (Veth *et al.*, 2019).

Identifying Submerged Landscape Sites on the Continental Shelf

Archaeological investigations in the Dampier Archipelago, Western Australia, have successfully demonstrated that Aboriginal archaeology inundated on Australia's continental shelf is not only able to withstand the often-destructive effects of marine inundation, but that Aboriginal archaeology can be systematically located and recorded in an underwater context (Veth *et al.*, 2019; Benjamin *et al.*, 2020; Wiseman *et al.*, 2021). The programme of investigations on Australia's North West Shelf has established the beginnings of an 'Australian Model of practice for submerged site detection' (Wiseman *et al.*, 2021: 168) which has been adapted to other environmental and cultural in Western Australia (Teschendorff, 2022). This process of identifying areas of high preservation potential via predictive modelling, however, is presented only as a starting point for further research and does not necessarily exclude other areas from containing submerged underwater cultural heritage.

Area specific environmental surveys, including geophysical and geotechnical data, can help to characterise the offshore environment at a localised scale and are essential for the identification of submerged palaeolandforms that may have cultural associations. Investigations globally have repeatedly shown that palaeolandform features are identifiable within geophysical data. An assessment of geophysical and geotechnical data relating to the Project Area may allow for the identification of submerged palaeolandforms that have cultural associations. The following suggestions were made by Wessex Archaeology (2023a: 48–49) regarding potentially identifiable submerged geological features that are likely to have a higher potential for the survival of submerged Aboriginal archaeological deposits:

- ▶ **Land 200 m either side of palaeochannels** that would have been present as creeks or rivers during the last 70,000 years. Palaeochannels can be over 1 km wide and often represent the complexity and dynamic nature of seasonal waterways that may have included multiple braided channels, areas of stagnant water, and/or abandoned channels. Palaeochannels have proven to be highly productive with regards to the preservation of archaeological and palaeoenvironmental remains and are of particularly high archaeological potential.
- ▶ **Submerged land 200 m from the perimeter of open/closed depressions**, wetlands and water bodies will present as depressions within the submerged landscape.

- ▶ **Escarments or ridgelines** with slope length and slope class (gradient) conducive to form caves and overhangs. Sandstone and limestone lithology is particularly sensitive.
- ▶ **Land within 500 m of former shorelines**, particularly shorelines that were relatively stable over longer periods of time during relative sea level stability. This includes former sandplains, coastal wetlands, and dune fields.
- ▶ **Dense shell mounds**, may be the sort of feature that could survive inundation and there is some recent evidence that this is in fact the case (McCarthy et al 2022: 75). There is a potential that a combination of sea water admixed to the lime rich shell mound matrix may have effect of bonding and cementing the structure together. If this is correct, these features could well have survived inundation and be readily identifiable on the submerged landscape. Shell mounds are often found on ancient cheniers, beach slopes or raised rocky knolls, anywhere between 100 m of current coastlines to a few kilometres inland.
- ▶ **Stone arrangements and fish traps**, may be present but are likely to be fragile site types that have only survived in exceptional circumstances.

Reviewing geophysical data relating to the Project Area may allow for the identification of whether there are any geomorphic features within, or near to, the Project Area that are palaeolandforms. Such landforms may have a demonstrated association with artefact distribution within the subaerial archaeological record, such as coastal palaeo-dunes, and offer prospective locations for the deposition of submerged landscape sites. It is acknowledged that the Project Area is located within a characteristically high-energy, near-shore environment and that this is likely to have had a detrimental taphonomic effect on any potential archaeological remains, however, as Benjamin (2010: 259) notes, “localized areas [for submerged landscape site preservation] may exist as exceptions to an otherwise unlikely region of study.” It is not possible to accurately comment on the preservation potential of submerged Aboriginal archaeological sites and/or palaeolandforms within the Project Area without a review of the necessary site-specific environmental data. This summary of the Aboriginal archaeology of the North West Shelf, however, has been limited by access to publicly available data, and so, has been broad scale, addressing the background information relating to submerged landscapes at a regional level. A more site-specific review of the potential for submerged landscape site deposition and preservation will require access to local environmental data, including geophysical and geotechnical data, concerning the Project Area.

HISTORICAL BACKGROUND

Onslow was relocated in 1925 primarily due to environmental challenges and the need for better infrastructure. The original town site, located near the estuary of the Ashburton River, faced issues such as frequent flooding, erosion, and limited access for larger vessels. These conditions hindered trade and made the area less suitable for settlement.

The decision to move the town to its current location, was aimed to provide a more stable and accessible environment. The new site offered better protection from cyclones, improved port facilities, and a more favourable setting for future development.

The pearling industry in Onslow began to thrive in the 1880s, as demand for pearls and mother-of-pearl (nacre) grew, particularly in Europe and North America. Divers would harvest pearl shells, which were highly valued for their use in jewellery and decorative items.

Onslow also played a significant role during World War II, serving as a refuelling station for the Navy. It became notable as the southernmost town in Australia to be bombed by Japanese forces. On the night of May 15, 1943, a single aircraft dropped three bombs on the airstrip, resulting in no casualties or damage to aircraft. Between 1952 and 1956, the Royal Navy utilised Onslow as a base for conducting tests on the nearby Monte Bello Islands, culminating in an atomic bomb detonation.

A major historical feature on the coast in the town is the Onslow Jetty which was built shortly after the establishment of the town in 1925. The wooden jetty was approximately 750 m in length and was constructed to serve the State Ship and Blue Funnel Line services to Singapore. This infrastructure facilitated the import of essential supplies, construction materials, timber, and general merchandise, while the region exported wool, pearl shell, and minerals. The jetty sustained significant damage from a cyclone in 1934, necessitating reconstruction. It remained operational until March 1961, when another cyclone destroyed over 300 m of the structure, forcing State Ships to anchor offshore and transfer cargo via lighter vessels. In 1972, a new landing was established in Beadon Creek, leading to the jetty's decline. As it fell into disrepair, the structure was ultimately destroyed during an Army explosives exercise in 1982.

Table 4. Historical timeline of Onslow and the 1925 Onslow Jetty

Year	Old Onslow Jetty
1885	Named after Sir Alexander Onslow, Western Australia's Chief of Justice, Onslow was established adjacent to the Ashburton River.
1925	Onslow port facilities degrade as shallowing waters due to "silting up". Townsite is moved eighteen kilometres east to be closer to deeper waters near Beadon Point. The original townsite became "Old Onslow". "Old Jetty" is built to accommodate trade ships exporting goods in (building equipment, provisions and general merchandise) and out (wool, pearl shell and minerals) of Onslow. The Jetty is constructed to be three-quarters of a kilometre. ⁷
1934	Jetty is rebuilt after being destroyed by a cyclone.
1943	On May 15, 1943, Onslow airstrip was bombed by a solo Japanese plane becoming the furthest south town to be bombed during World War II. No casualties or damage to aircraft was caused (see Figure 6).
1952-1956	Onslow is used as a base for the Royal Navy during atomic testing on the Monte Bello Islands.

⁷ <https://www.australiasnorthwest.com/explore/pilbara/onslow/old-onslow-and-onslow-heritage-trail/>

Year	Old Onslow Jetty
1961	Jetty loses over 300 m of its length, limiting access to larger ships which had to anchor offshore, and barges were used to load and unload the ships wares.
1972	The Jetty falls into disrepair as a landing is established in Beadon Creek.
1982	The Jetty is destroyed during an army explosives exercise. ⁸



Figure 6. Onslow, Western Australia 1943. The Jetty, with Onslow Township in the Distance Acc No. 051756⁹

⁸ Shire of Ashburton, 2024, <https://www.ashburton.wa.gov.au/tour/onslow/history.aspx>

⁹ <https://www.awm.gov.au/collection/C16154>

PREVIOUS HERITAGE ASSESSMENTS

Aboriginal Heritage

The following summary of previous research has been compiled from information that is available from the Department of Planning, Lands, and Heritage's (DPLH) Aboriginal Cultural Heritage Inquiry System (ACHIS). This may not be a comprehensive record of all heritage sites recorded, and surveys undertaken, with the possibility that some information may exist in the 'grey literature' held by private individuals and organisations which has not yet been provided to the DPLH for addition into the ACHIS. Accordingly, caution should be exercised in areas where no surveys have been completed, or where surveys have only been completed for parts of the area where the proposed activity is intended. Heritage surveys over only part of the land may not have identified all possible sites. In addition, surveys that took place more than 15 years ago may not have reliable spatial information. A copy of the ACHIS search results and maps can be found in Appendix Two.

One Aboriginal site boundary is within Project Area (see Table 5 and Map 2) and two sites are adjacent (Table 6). A total of five heritage assessments have occurred in areas adjacent to the Project Area (Table 5).

Table 5. Previously recorded Aboriginal Heritage Places intersecting the Onslow Recreational Jetty Project

DPLH ID	Site Name	Status	Type	Legacy ID
6618	Dew Talu	Register	Ritual / Ceremonial; Water Source	PO6363

Table 6. Previous Aboriginal Heritage Surveys adjacent to or intersecting the Onslow Recreational Jetty Project

DPLH ID	Report Title	Author	Type
17913	Report on a Survey for Aboriginal Sites at the Proposed Exmouth Salt Pty Ltd Saltworks, Onslow. Dec.1989.	Quartermaine, G.	Archaeological and Ethnographic
27735	Section 18 Archaeological Survey & Ethnographic Desktop Study for the Proposed Onslow Residential & Industrial Areas - Area 1, Pilbara, WA.	Puletama, D.	Archaeological and Ethnographic
200021	Report on Cultural Heritage Surveys of Places at Onslow and Port Hedland, WA Where a Submarine Fibre Optic Cable May Come Ashore.	Webb, R. E.	Archaeological
200190	Report of an Ethnographic Survey of the Proposed Onslow Ring Road, Onslow, Pilbara, Western Australia February 2015. [TBD]	McDonald, E. M.	Ethnographic
200191	Report of an Aboriginal Archaeological Survey of the Proposed Onslow Ring Road Construction Corridor, Onslow, Western Australia.: January 2015, [TBD]	Stedman, J.	Archaeological

Table 7. Previously recorded Historical Heritage Places adjacent to the Onslow Recreational Jetty Project

DPLH ID	Site Name	Status	Type	Legacy ID
8920	Onslow 1	Register	Artefact Scatter / Midden	P03563
6617	Burubarladji	Register	Creation / Dreaming Narrative	P06362

6617 Burubarladji (Ethnographic site - Creation / Dreaming Narrative)

Burubarladji is a mythological site where the water snake the “Warnamankura travels underground and creates a number of yinta (also jinta) or soaks in the Onslow area”. This site is a soak, reported in 2018 to be located “...adjacent to the Onslow Salt conveyor belt”. The site is also connected to the soak in concentration 1 of 8920 Onslow 1 (Archae-aus, 2021). Burubarladji is not in the Project Area, however it does demonstrate the significance of the cultural landscape for Thalanyji.

6618 Dew Talu (Ethnographic site - Ritual / Ceremonial; Water Source)

Dew Talu is a water source and ceremonial site located on the offshore island, Twin Island. The soak is said to be connected to another soak located inland on Lot 300 (within 8920 Onslow 1) via “an undersea ‘tunnel’ or ‘hole’” (Archae-aus, 2021). These two soaks share the same name, Dew Talu. The site is connected to 6617 Burubarladji and the soak at 8920 Onslow 1, among other Onslow water sources that are all used by water snake *Wanamankura* for travel between locations underground (Archae-aus, 2021). Dew Talu is not in the Project Area.

8920 Onslow 1 (Archaeological site - Artefact Scatter / Midden; Ethnographic – yinta)

Originally recorded in 1985 by Jan Turner and Cyril Peck, Onslow 1 is a midden with both shell and stone artefacts. In 2021 a BTAC/Archae-aus survey team rerecorded the site and identified three concentrations which are surface expressions of the larger site recorded in 1985 which had been buried by the sand dunes. A freshwater soak was known to Thalanyji sits adjacent to the shell midden and is part of the Onslow 1 site. During a 2022 survey Thalanyji representatives noted that the site would have been an ideal camping area due to protection from the sand dunes and the proximity to a freshwater soak (Archae-aus, 2022). This site is 200 m south of the Project Area.

Concentration 1 was noted to be a historical site as well as an artefact scatter and shell midden. Sampling conducted in 2021 determined the concentration to be mostly a natural deposit despite many of the shell species observed being edible shellfish. No stone artefacts were uncovered however two flaked glass pieces were identified at the base of the dunes outside of the shell concentration in the southeastern portion of the site (Archae-aus, 2023b). The concentration features the freshwater soak, “Yinta” to the Thalanyji, which was recorded at the site in 2018 and noted again in 2021. On the 2021 survey a Thalanyji representative stated that the yinta in Onslow 1 was connected to Burubarladji, the Ashburton River, the Cane River, and the Yanrey River (Archae-aus, 2021).

Concentrations 2 is a low-density shell midden made up almost entirely of *Tegillarca granosa* (cockle), and at least two stone artefacts. Other shell species noted here were *Melo* sp. (baler), *Angaria* (top shell) and *Saccrostrea* (rock oyster). The stone artefacts were two heat-fractured pieces of grey silcrete which do not occur naturally in the area. These were found just outside of the shell midden. In 2023 Concentration 2 was subject to test pits which revealed that “more cultural material is present in the concentration than can be seen on the surface” (Archae-aus, 2023). The shovel test pits and then excavation as part of a section 18 application for the Mineral Resources camp revealed over 125 economic shells dominated by *Tegillarca granosa* (cockle). The radiocarbon dating of shell from this concentration shows use by Thalanyji people between 1,030 and 1,500 cal BP.

Table 8. Radiocarbon dating of marine shell and fish otoliths at 8920 Onslow 1

Material	Concentration	Wk	F14C%	Error	Result	Error	Calibrated from	Calibrated to
<i>Terebralia palustris</i>	2	WkA-58380	81.15201679	0.18336676	1678	18	1300	1030
<i>Syrinx</i>	2	WkA-58374	80.41214255	0.18166845	1751	18	1360	1100
<i>Tegillarca granosa</i>	2	WkA-58383	79.79407328	0.17551915	1813	18	1430	1160
<i>Tegillarca granosa</i>	2	WkA-58381	79.70654064	0.17396738	1822	18	1450	1170
<i>Tegillarca granosa</i>	2	WkA-58379	79.67335526	0.180146	1825	18	1450	1170
<i>Tegillarca granosa</i>	2	WkA-58382	79.34588952	0.17936113	1858	18	1500	1220
<i>Terebralia palustris</i>	3	WkA-58377	84.34844097	0.1904729	1367	18	970	690
<i>Melo</i>	3	WkA-58375	83.89823094	0.18942173	1410	18	1040	740
<i>Otolith</i>	3	WkA-58384	82.70049778	0.18684791	1526	18	1170	880
<i>Tegillarca granosa</i>	3	WkA-58376	80.96581368	0.17171189	1696	17	1310	1040
<i>Tegillarca granosa</i>	4	WkA-58378	79.65680954	0.17994683	1827	18	1450	1170

Concentration 3 is an artefact scatter and reduction area as well as a shell midden. The concentration had the largest number of stone artefacts featuring complete flakes, longitudinal and transverse flake fragments, and a micro blade. The artefacts show varying stages of lithic reduction, the chert noted to be especially reduced. None of the raw materials identified occur naturally at the site, indicating long distance trade. The shell species present was varied including edible shellfish and shells that could be used for tools and ornaments. Some of the *Melo* (baler) identified was noted to look as though it had been modified into 'blanks' indicating preparation to be turned into shell knives. In 2023 Concentration 2 was subject to test pits which revealed that considerably "more cultural material is present in the concentration than can be seen on the surface" and that the cultural material extended beyond the mapped surface extension of the concentration (Archae-aus, 2023).

During the salvage of concentration 3, hundreds of bone and teeth fragments were recovered from marsupials, birds, fish and turtles. Some of the marsupial teeth has been identified belonging to the mala / rufus hare wallaby (*Lagorchestes hirsutus*). The mala is now extinct on the Australian mainland with naturally occurring populations are now confined to Bernier Island and Dorre Island Islands. Some of the fish remains are otoliths (36 were recovered) which has been initially identified as catfish (*Arius* spp.) There are also present hundreds of fragments of crab including mud crab. A number of the bone, teeth and crab fragments have been burnt. The marine invertebrate components of the midden include hundreds of fragments of chitons (*Acanthopleura spinosa*), sea urchin (*Tripneustes gratilla*), pearl oyster (*Pinctada*), oyster (*Saccostrea*), mangrove whelks (*Terebralia* and *Telescopium*), cockles (*Tegillarca granosa*), baler shell (*Melo*), tusk shell (Scaphopoda) and syrinx (*Syrinx aruanus*). The baler

shell has been used to manufacture shell knives like those recorded from Barrow Island (Hook et al. 2024a). The tusk shells are the broken posterior end of beads, showing bead manufacture has occurred at this. This is the second tusk shell bead manufacturing site so far identified in Australia site (see Hook et al. 2024b). The radiocarbon dating shows this concentration was created by Thalanyji people camping here between 690 and 1310 cal BP.

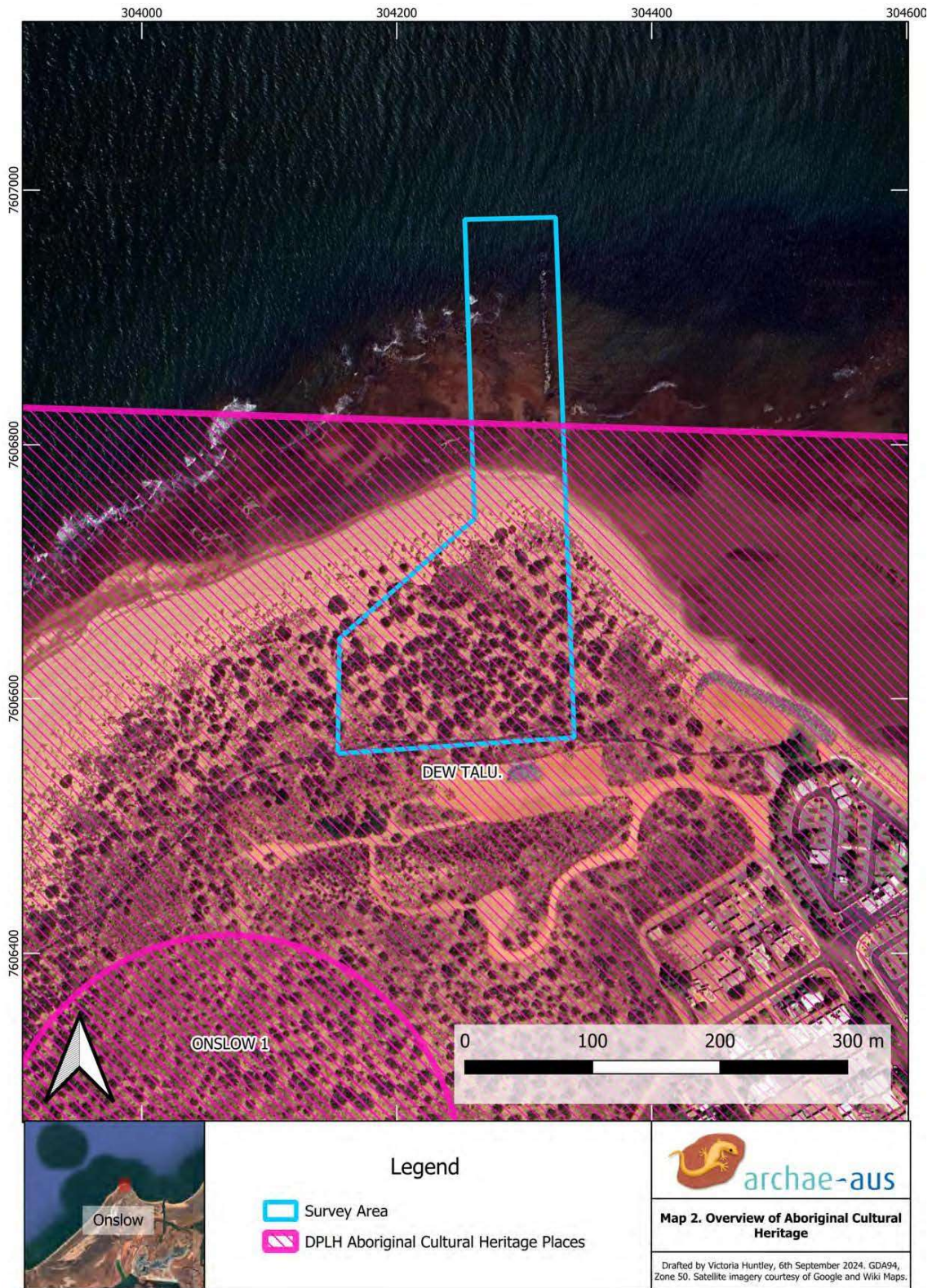
During the Test Pitting Program in 2023 on Lot 300 a fourth concentration (Concentration 4) was identified. A sample square was placed on the concentration which was assessed to have a limited potential for subsurface materials. The concentration comprised of a sparse surface scatter of shell and fish bone (Archae-aus, 2023). The marine invertebrates include cockles (*Tegillarca granosa*), mangrove whelks (*Terebralia* and *Telescopium*), chitons (*Acanthopleura spinosa*), and baler (*Melo*) shell fragments. The single radiocarbon date from this concentration is 1170 to 1450 cal BP.

The dates from the three concentrations show distinct occupation events that overlap between 690 and 1,500 cal BP. The marine invertebrates show a range of subtidal and tidal habitats were being utilised by the Thalanyji ancestors, including mangroves which are not present now in this immediate area. Currently, the nearest mangroves are at Beadon Creek 1.9 km east. Onslow 1 site shows a rich record of past use of Onslow during the late Holocene. This is similar to other salvaged and dated sites on the back of the town of Onslow. Sites MRO14-01 and MRO14-02 were dated to 1,096 cal BP (Wk 42506) and 1,780 cal BP (Wk 42503) and had numerous flaked stone artefacts, catfish otoliths and mudcrab claws present in the assemblages (Archae-aus, 2015).

Historic Heritage

No registered historical sites are within the Project Area, however given the location of the area within the town of Onslow historical structures and remains, such as the Onslow Jetty are present but are not protected.

Map 2. Overview of Aboriginal Cultural Heritage Places



Map 3. Overview of Local Heritage Survey Places and Shipwrecks/Maritime heritage places on the State and Commonwealth databases



Underwater Cultural Heritage

Shipwrecks

Table 9 lists the shipwrecks and port-related infrastructure sites for the Onslow Region (see Map 4). None of these are within the Project Area.

Table 9. List of maritime archaeological sites near Onslow (based on information provided by the WAM from the *Wreck Finder* database and the internal WAM Shipwreck Database, provided by Ross Anderson, 26th September 2024)

Name	Number	Site Type	Rig	When Lost	Found	Protected	Where Lost	When Built	Industry
Onslow Jetty	22	Port or Navigation infrastructure		Unknown	Y	Unknown			
Old Onslow	23	Port or Navigation infrastructure		Unknown	Y	Unknown			
Fortescue	267	Shipwreck	Lugger	1881/01/07	N	Protected State	Yammadery Creek		Pearling
Boreas	322	Shipwreck	Lugger	1932/05/04	N	Protected Federal	NE end Weld Island, north of Onslow, 15 miles from Mary Anne Passage	1923	Pearling
Ariel	337	Shipwreck	Schooner	1868/01/04	N	Protected Federal	Locker Point, 50k west of Ashburton	1845	Pearling
Alpha	340	Shipwreck	Schooner	1881/01/07	N	Protected State	Yammadery Creek	1877	Pearling
Rosebud	395	Shipwreck	Lugger	1933/09/12	N	Protected Federal	Airlie Island	1900	Pearling
Unidentified Lighter	683	Shipwreck		1893/02/25	N	Protected State	Onslow		
Will Succeed	796	Shipwreck	Lighter	1963	N	Not protected State	Beadon Creek, Onslow	1924	Port services
Lady Pamela	1006	Shipwreck		1995/02/24	N	Not protected Federal	10nm north of Onslow		Fishing
Adalia	1027	Shipwreck		1880	N	Protected Federal	Near Mangrove Passage		
Ellen	1170	Shipwreck		1905/02/08	N	Protected Federal	Onslow		
Mulga #17	1439	Shipwreck	Barge	1971/09/20	N	Not protected Federal	Onslow	1966	Port services
Viking	1465	Shipwreck	Fishing vessel	1969/09/13	N	Not protected State	Beadon Creek, Onslow		Fishing
Dolphin	1493	Shipwreck	Cutter	1902/06/14	N	Protected Federal	Off Beadon, Onslow	1875	
Southern Cross	1643	Shipwreck	Lugger. Schooner rigged	1942/03	N	Not protected State	Beadon Creek, Onslow	1903	Pearling
Maria	1645	Shipwreck	Lugger. Schooner rigged	1942/03	N	Not protected State	Beadon Creek, Onslow	1902	Pearling

Name	Number	Site Type	Rig	When Lost	Found	Protected	Where Lost	When Built	Industry
Mutiara	1729	Shipwreck	Lugger. Schooner rigged	1942/03	N	Not protected State	Beadon Creek, Onslow	1901	Pearling
Tiram	1726	Shipwreck	Lugger. Schooner rigged	1942/03	N	Not protected State	Beadon Creek, Onslow	1903	Pearling
Maritana	1731	Shipwreck	Lugger. Schooner rigged	1942/03	N	Not protected State	Beadon Creek, Onslow	1902	Pearling
Beadon Creek UNID	1687	Shipwreck	Unknown		Y	Not protected State	Beadon Creek, Onslow		
Ashburton Unidentified	1705	Shipwreck	Motor Vessel		Y	Not protected Federal			Unknown
Harmony	1710	Shipwreck		1995/02/24	N	Not protected Federal	10nm north of Onslow		
Merlin	1732	Shipwreck	Schooner	1940	N	Protected Federal	Entrance to Beadon Creek		Pearling
Curlew	1368	Shipwreck	Lugger	1911/02/07	N	Protected Federal	Onslow / Montebellos	1892	Pearling
Sea Ripple	472	Shipwreck	Barquentine	1893/02/25	N	Protected Federal	Onslow	1863	Hulk / lightship

It should be noted that:

- ▶ The listings Beadon Creek UNID (1687) and *Will Succeed* (796) likely refer to the same vessel (Stedman 2015a); and
- ▶ Some shipwrecks are listed as protected under the Federal legislation due to cautionary default settings in the WA Museum's database, as the precise locations of these wrecks are not known and have not been entered. Generally speaking, maritime wreckage lying within the jurisdiction of Western Australian State waters is not protected by the Commonwealth *Historic Shipwrecks Act 1976*.

Table 10. List of additional shipwrecks possibly lost near Onslow

Name	Site Type	Rig	When Lost	Found	Protected	Where Lost	When Built	Industry
Anthons	Shipwreck	Brigantine	1912	N	Protected Federal	Onslow area / Vlamingh Head	1875	Cargo / pearling
Lapwing	Shipwreck	Schooner	1911	N	Protected Federal	Onslow / Montebellos	1899	Pearling

In addition to the database entries listed in Table 10, Michael Gregg (WAM) provided information from the WAM's Maritime History Department's research database of the ship *Anthons*, which in November 1912 sprung a bad leak off North West Cape and was forced to return to Onslow where she was beached and eventually abandoned and broken up. The wreck remains are listed as possibly lying at Onslow (Beadon Creek, the Ashburton River or Yammadery Creek) or possibly near Vlamingh Head (unlikely). A report from the Northern Times on 30th November 1912 records that:

ANTHONS SPRINGS A LEAK. HER CARGO RUINED

Our Onslow correspondent also writes under date November 22:-The schooner Anthons bound south 40 miles west of the N. W. Cape, sprung a bad leak, and was compelled to return to Onslow. On arrival here, she had 4ft. 6 in. of water in her hold, and although the crew have been continually on the pumps they have made no impression. It has been arranged that she is to proceed to Yamaderry Creek, where she will be able to be beached and necessary repairs done. She has a cargo on board for Point Cloates and Maud Landing, which has been ruined.

The Commonwealth and State Shipwreck databases which plot different wrecks and in the case of the State Shipwreck database also onsite marine sites have been mapped according to the Project Area (see Map 4). The State Shipwreck list includes the Onslow Jetty, however as the jetty was built in 1925 it is too recent to be protected under the *Maritime Archaeology Act 1973*.

Therefore, while the jetty is of historical interest, it is not protected under the Maritime heritage legislation.

Submerged Landscapes

No previous assessments have been made in the Onslow region of the potential for submerged sites and landscapes.

Map 4. Overview of Maritime Archaeological Sites and Shipwrecks near the Project Area



SECTION THREE – METHODS

ARCHAEOLOGICAL ASSESSMENT

Where access was available the Project Area was visually inspected on foot by the archaeologists and Thalanyji Knowledge Holders to identify and record any new ACH archaeological places or isolated cultural materials to a site identification level. A site identification survey methodology may be summarised as:

- ▶ Recording of any Aboriginal Cultural Heritage (ACH) is undertaken to a level of detail that is sufficient to address sections 5 and 39 significance criteria of the *Aboriginal Heritage Act 1972* (AHA) for each ACH place that is identified.
- ▶ Identification of any significant historical material.
- ▶ The Site Identification level survey is to provide the client with sufficient information regarding the extent, characteristics and significance of any ACH within the Project Area.
- ▶ That the information recorded will satisfy the requirements of the Aboriginal Cultural Heritage Committee when considering an application under section 18 of the AHA.
- ▶ A key aspect of anthropological Site Identification surveys is the requirement to inform the Aboriginal Heritage Consultants of the purpose and extent of the proposed ground disturbance works, including any impact this may have on ACH, so that they can make informed decisions about a place.
- ▶ For archaeological surveys, there needs to be a rigorous assessment of Aboriginal Cultural Heritage materials to ensure that the full range of archaeological values are recorded and to use the information to determine the importance and significance of an ACH place.

The aims of the archaeological assessment were to:

- ▶ Record any newly identified ACH archaeological places to a Site Identification level within the Project Area.
- ▶ Integrate the archaeological assessment results with the ethnographic assessment to inform a discussion of management recommendations, in consultation with the Thalanyji Knowledge Holders.

ETHNOGRAPHIC ASSESSMENT

The ethnographic assessment of the survey area involved a Site Identification (Site ID) methodology. Ethnographic Site ID surveys aim to assess whether any Aboriginal Cultural Heritage or ethnographic sites are present within the survey area (or, where relevant, surrounding areas) and, if so, record, and describe the significance of these sites. Specifically, the methodology is designed to address the requirements involved in obtaining government approval for a Section 18 notice under the *Aboriginal Heritage Act 1972*, required for those instances involving the proposed disturbance of an Aboriginal Site. With respect to ethnographic site recording, the Site Identification Survey methodology involves considered, on-site discussion with the appropriate Aboriginal person/s to determine the significance of the site in question (a “significance assessment”). Sites may be recognised as significant for spiritual, social, aesthetic, and/or historical reasons, and assessed as such according to various criteria drawn from relevant legislation, industry codes, and a review of scholarly and ethnographic literature.

The ethnographic assessment was conducted on site with Thalanyji Representatives Darheio Gibb, Joseph Kelly, and Jaiden Hayes, with senior anthropologist Jaimal Sandhu and with assistance from BTAC Heritage Coordinator Richard Gordine. A discussion and further ethnographic assessment of the survey area was conducted with Thalanyji Elders Anne Hayes and Shirley Hayes. The discussion was conducted at Anne Hayes's home, with maps and media of the survey area provided to facilitate.

In addition to the above, further general aims and methods of ethnographic heritage surveys may be summarised as follows:

- ▶ Undertake an ethnographic investigation through on-Country consultation with the appropriate and representative Traditional Owners to spatially define and map the existence of ethnographic heritage places and cultural values of the proposed survey area.
- ▶ Provide a consideration of the heritage place(s) in a regional context, and if the place values are/are not integral to a cultural heritage landscape.
- ▶ Complete the research and/or consultation required to meet the requirements of the *Aboriginal Heritage Act 1972* (as amended and reinstated in October 2023).
- ▶ Make recommendations regarding the management of the identified heritage places, including any further research and/or consultation that may or may not be required.
- ▶ Review previous recordings and reports for the proposed survey area(s) to adequately understand attributes and location of cultural sites/places and their association with the values of the Cultural Heritage Landscape.

SECTION FOUR – RESULTS

ARCHAEOLOGICAL ASSESSMENT

The Project Area a rectangular polygon that measures 400 m (north / south) by 190 m (east / west).

Location

Onslow Recreational Jetty Project Area is west of the ANZAC Memorial Park and accessible by the existing boardwalk. The polygon extends north from the edge of the dunes, across the beach and into the surf zone where the historical jetty lies submerged as ruins (see Plate 6 and Plate 7).

Coordinates

The coordinates for the surveyed area are listed in Appendix One.

Environment

The Onslow Recreational Jetty Project Area is situated within a series of moving Holocene coastal sand dunes that are covered by a moderately dense cover of grasses (unknown spp.), occasional *Triodia* sp., and low shrubs. Low *Acacia* spp. trees are present throughout, especially on the slopes or top of dunes (see Plate 2 and Plate 3). The Project Area extends down to the beach and tidal zone. Modern rubbish and a historical structure were identified within the Project Area (see Plate 4 and Plate 5).

Methods

The Project Area was inspected using pedestrian transects with the archaeologists, Thalanyji Traditional Owner and the BTAC heritage coordinator spaced no more than 30 m apart along the polygon. Team members visually inspected the terrain for archaeological material.

Results

The archaeological assessment of Onslow Recreational Jetty Project Area is **complete**.

Aboriginal Cultural Heritage

No Aboriginal cultural heritage sites or isolated artefacts were identified. Given the mobile nature of coastal sand dunes, the absence of cultural heritage sites is not uncommon. Based on previous heritage work in the Onslow region, the Project Area is in a high-risk zone for sub-surface cultural material including burials. A 2,500- to 750-year-old sub-surface shell midden has been recorded immediately adjacent to the Project Area (**8920 Onslow 1**). On the surface a few shells and artefacts were visible, however after shovel test pitting and excavation hundreds of economic, symbolic and utilitarian marine invertebrates including gastropods, bivalves and crustaceans were recovered. There is evidence of bead making and the use of baler shell to make formal serrated edged knives like those found on Barrow Island (Hook et al, 2024a). There are also food remains in the midden of hare wallaby (*Lagorchestes* spp.) and catfish (*Arius* spp.) as well as stone tools used for wood working, and fibre work. Such sites are highly significant to the Thalanyji people and are also significant for archaeological research. The 8920 Onslow 1 was also identified in a location with historic disturbance like that of the Project Area.

Therefore, given previous heritage work in the region and immediately adjacent to the Project Area, there is a high risk of the Shire of Ashburton project's ground disturbing activities damaging significant cultural material in the Project Area. To manage this risk an investigation, prior to the commencement of any ground disturbance activities, is required to determine: (1) the presence; and (2) if located an assessment of significance; of any sub-surface cultural material.

Shovel test pitting (STP) is a proven first step in detecting the presence or absence of sub-surface cultural material (Krakker, Shott and Welch, 1983; Shott, 1985; Kintigh, 1988; Way, 2017). STP is a technique used by Australian archaeologists to test for the presence of sub-surface cultural material. It is a useful technique in situations where the archaeological materials are not obtrusive, due to factors such as dense ground cover or burial by sedimentary processes. In such cases, conventional methods of pedestrian survey to inspect the ground surface are of little use. As the name implies, STPs are small test pits up to 50 x 50 cm, dug by hand, using shovels or hand shovels, to a depth of up to about a metre. A key consideration in the design of a shovel-test sampling program is the spacing and layout of STPs. The success of a program in identifying and characterising sites obviously depends on the underlying spacing and density of the targeted cultural materials (Krakker, Shott and Welch, 1983; Shott, 1985; Kintigh, 1988; Way, 2017). A standard well proven approach is to use a sample strategy based on a staggered grid system ensure sufficient coverage (Krakker, Shott and Welch, 1983).

The method for excavating each STP involves using long-handled shovels for initial excavation. Once the depth reaches approximately 40 cm, hand shovels will be utilised to continue the process. Excavation will stop upon the discovery of the first artefact; if no artefact is found, the excavation should proceed to a depth of about 90 cm, unless significant obstacles, such as large tree roots, are encountered. All excavated material should be sifted through nested sieves of 6 mm and 3 mm. The presence of unusually large pieces or concentrations of charcoal will be documented and collected for potential dating, noting depths and associations with cultural material. Any artefacts discovered should be recorded in detail, returned to the excavation hole, and the hole backfilled. Each STP should generally measure 40 x 40 cm.

If sub-surface archaeological site(s) are located in the shovel test pits then the age and quantity of the artefacts will need to be established using archaeological excavation and radiocarbon and optically stimulated luminescence dating. If skeletal remains are found, then all work needs to cease, and advice sought from the Registrar of Aboriginal Sites and BTAC. A detailed Cultural Heritage Management Plan prepared for the Project Area contains the steps required if significant cultural material and burials is identified (Archae-aus 2024).

Historical Cultural Heritage

Remanent WWII structures and artefacts were identified in the Project Area, however, as these are not on the Local Heritage Survey, they are not protected under the *Heritage Act 2018* or the *Planning and Development Act 2005*.

Submerged Cultural Heritage

The Project Area is situated in a high-energy near-shore environment, which likely impacts the preservation of any potential archaeological remains. However, as (Benjamin, 2010: 259) points out, “localized areas [for submerged landscape site preservation] may exist as exceptions to an otherwise unlikely region of study.” Without a thorough examination of specific environmental data, it is challenging to accurately assess the preservation potential of submerged Aboriginal archaeological sites or palaeolandforms in the Project Area. This summary of Aboriginal archaeology in the Northwest Shelf has been constrained by the availability of publicly accessible data, resulting in a broad overview that addresses submerged landscapes at a regional level. A more detailed evaluation of the potential for site deposition and preservation will require access to localized environmental data, including geophysical and geotechnical information specific to the Project Area which has yet not been compiled or may not be compiled given the small scale of the project. Therefore, we suggest that the given the

high energy coastal environment the Project Area and the localised scale of impacts the project development has a very low risk of damaging submerged cultural heritage.



Plate 2. Survey Team walking to Project Area



Plate 3. View north across the dunes in the Project Area



Plate 4. Historical structures within Project Area



Plate 5. Historical rusted piping in Project Area



Plate 6. Historical Onslow Jetty within Project Area



Plate 7. Survey Team on beach within Project Area

ETHNOGRAPHIC ASSESSMENT

Results

The ethnographic assessment of Onslow Recreational Jetty Project Area is **complete**.

Aboriginal Cultural Heritage Sites

No new Aboriginal cultural heritage sites were identified.

Previously Identified Sites: DPLH Registered Site Boundaries Overlapping Survey Area

The search of the AHIS revealed that (according to DPLH records) **one (1)** registered Aboriginal site intersects the survey area: “Dew Talu” (*Dew Thalu*) site (ID 6618). Furthermore (again, according to DPLH records) “Burubarladji” (*Buurabalayji*) mythological site (ID 6617) is adjacent to the survey area.

Both “Burubarladji” (*Buurabalayji*) mythological site (ID 6617), and the “Dew Talu” site (ID 6618) are depicted on the ACHIS with restricted boundaries. That is, because of the sensitivity of the information regarding these sites, a restricted or dithered boundary is used in order to preserve the confidentiality the exact location and extent of a site. The resulting ACHIS polygon is approximately 4 km².

With respect to registered sites 6617 and 6618, Quartermaine and O’Conner (1989: 9) provide a brief discussion of the significance and location of the “Burubarladji” (*Buurabalayji*) mythological site and the “Dew Talu” ceremonial increase centre and spring. However, O’Connor (who was not present on site during the 1989 survey, see (Quartermaine and O’Conner, 1989: 8) seems to have confused “Burubarladji” (*Buurabalayji*) and “Dew Talu”, identifying the former with the salt pan and the latter with the *yinta* or soak *Buurabalayji* (ID 6617). *Buurabalayji* is in fact located in the vicinity of the Onslow Salt Jetty on the west side of the salt pan, while *Dew Thalu* is located on an offshore island (location here withheld). These locations were corroborated during the Thalanyji Native Title claim by a senior Thalanyji man on Day 4 of the Preservation Evidence on Country (Federal Court of Australia. 1998. No WAG 6113 of 198. North J.).

Based on the results of the desktop research conducted with respect to the locations of these Registered Sites, and in conjunction with the results of the field survey (see below), the authors of this report are thus of the opinion that the two registered Aboriginal Sites listed on the ACHIS do not fall within the boundaries of the Project Area.

Significance Assessment

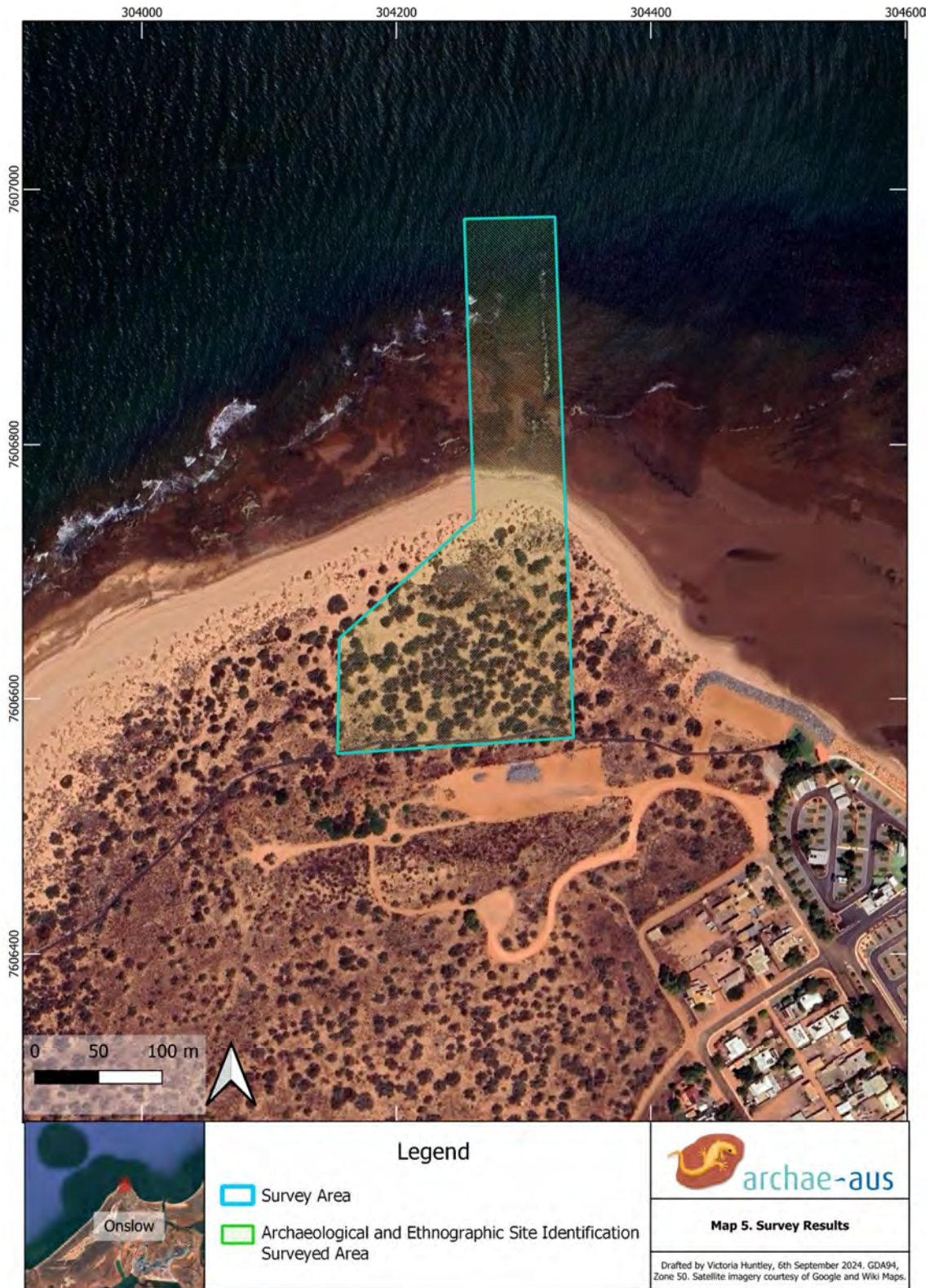
As outlined in a previous ethnographic report for BTAC and the Shire of Ashburton (Archae-aus, 2023a), the Thalanyji people have a long and deep social and cultural connection to the coastal landscape. As stated in that report, evidence of the importance of Thalanyji cultural connections to the coast and sea can be found in ethnographic research dating back over a century. Daisy Bates (1985), in research published a century ago, reports that the Thalanyji constructed and made use of watercraft: “The coastal natives of the Ashburton and Northwest cape also used a species of raft, similar to that used in the Roebourne district, but made of stumpy corkwood trees, growing near the swamps” (258). Bates estimates that the “natives” accessed up to three miles outside reefs and onto the “black rock” and reports on the use of “floating logs” and rafts from the King Sound and Roebourne district as far “probably” as Northwest Cape. Anthropologist Norman Tindale (1974: 254) likewise refers to the use of “a form of wooden canoe” used by the Thalanyji, that was kept near the seashore and used to access Barrow and the Montebello Islands.

More recent ethnographic research has continued to demonstrate that Thalanyji people continue to hold knowledge and assert rights and interests in an area extending over the coast, sea and certain offshore islands, (Jones, 2013 McDonald, 2005; Sandhu and McDonald, 2023).

The gathering of marine resources is both of economic importance and an important source of personal and group identity to the Thalanyji people. As Walsh notes (Walsh, 2008) hunting or gathering an animal or plant species is integral to the 'holding' (looking after) of that species and that its 'use' and 'care' are interdependent (357). Walsh (2008) and other researchers, for example Latz, (1996) and Blythe and Wightman, 2003), also notes the interrelationship between resource use and the Dreaming in framing Aboriginal taxonomic practices and the attribution of significance to natural species. In traditional Thalanyji society, this principle is demonstrated by the ontological relation between salt/freshwater species and two forms of the watersnake spiritual being (*warnamankura*): the sea-snake (*thanardinyungu*) and the freshwater snake (*yardinyungu*).

The significance of the coastal area may thus be said to involve both the tangible and intangible elements of Aboriginal cultural heritage, enveloping both resource use and Dreaming narratives that link the coast both to offshore sites and sites further inland. Thus, while no new ethnographic sites were identified during the survey, the Recreational Jetty Project Area *should be understood as part of a more general cultural coastal landscape of **outstanding significance** to the Thalanyji people.*

Map 5. Survey Results



SECTION FIVE – DISCUSSION & RECOMMENDATIONS

DISCUSSION

With regards to the ethnographic and intangible cultural heritage of the Project Area:

- ▶ No new heritage sites were identified during the ethnographic survey.
- ▶ The survey area should be understood as part of a more general cultural coastal landscape of outstanding significance to the Thalanyji people.
- ▶ The ethnographic significance of the coastal landscape enveloping the Onslow Recreational Jetty Project Area involves both tangible and intangible elements of Aboriginal cultural heritage.

With regards to the tangible cultural heritage of the Project Area:

- ▶ No heritage sites were identified during the archaeological survey.
- ▶ There is a high potential for sub-surface cultural material related to past occupation of the Onslow region by Thalanyji people in the coastal dunes (high risk zone), including shell middens, artefact scatters and burials (see Map 6).
- ▶ There is limited potential for submerged cultural landscapes owing to the high energy nature of the coastline.
- ▶ Historical heritage is present in the Project Area in the form of concrete structures, remains of the Old Onslow Jetty and artefacts such as pipes. None of these structures are protected by the Historical or Maritime heritage legislation.

The high risk for Aboriginal sub-surface cultural sites in the Project Area needs addressing by the Shire of Ashburton. Monitoring is an option; however, this occurs during construction and the identification of archaeological sites during construction will result in delays as the material is assessed and its significance ascertained. An approach that will not result in delays during construction is to conduct shovel test pitting across the high risk zone (coastal dunes) of the Project Area prior to any proposed ground works. The shovel test pitting requires sufficient sampling coverage to be certain that no sub-surface archaeological sites occur in the high risk zones of the Project Area.

RECOMMENDATIONS

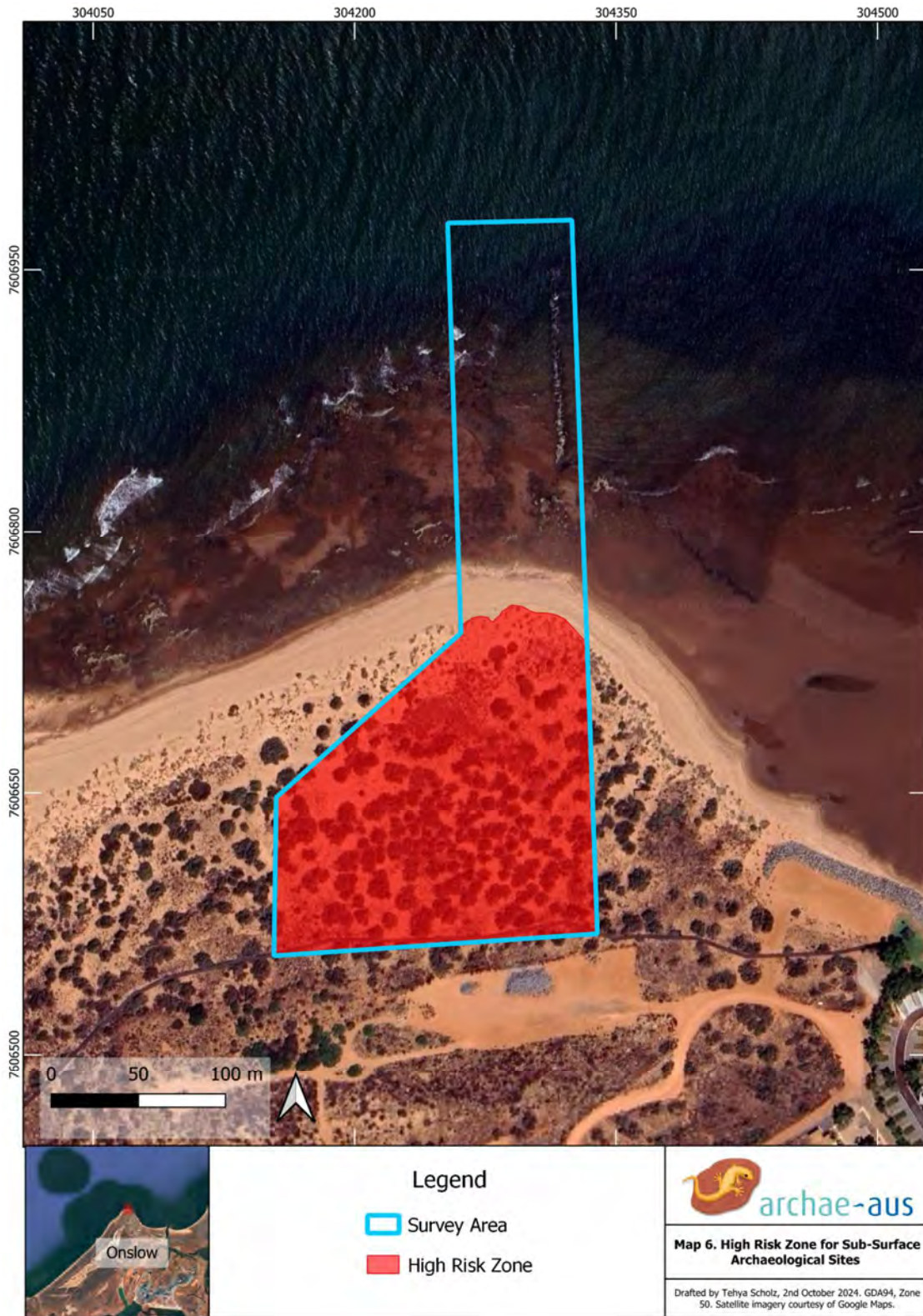
Based on the outcome and findings of the archaeological and ethnographic surveys, Archae-aus and the authors of this report make the following statements and recommendations:

- 1) The archaeological survey of the Onslow Recreational Jetty Project Area is **complete**.
- 2) The ethnographic survey of the Onslow Recreational Jetty Project Area is **complete**.
- 3) No new Aboriginal Cultural Heritage Sites were identified during the fieldwork.
- 4) According to DPLH records, Aboriginal Cultural Heritage Site **Dew Talu (ID 6618)** (Ritual / Ceremonial; Water Source) intersects the Project Area.
- 5) Further to the above and based on research for this and previous reports including accounts of senior Thalanyji people (Archae-aus 2021), we are of the opinion that the boundaries of

Dew Talu (ID 6618) held by the DPLH are inaccurate, and that the Project Area does not intersect with this site.

- 6) It is understood that the Shire of Ashburton plan to apply for a section 18 under the *Aboriginal Heritage Act 1972* to disturb this **Dew Talu (ID 6618)**; noting that there is no intersection of proposed Shire of Ashburton project areas and this site.
- 7) It is recommended that BTAC confirm whether the DPLH boundaries for **Dew Talu (ID 6618)** are inaccurate, and if so, provide permission for Archae-aus to update the DPLH records.
- 8) The Thalanyji Traditional Owners during the fieldwork recommended the coastal dunes in the Project Area be subject to test pitting to identify any sub-surface archaeological sites before any ground disturbing works commence.
- 9) Owing to the high risk for sub-surface cultural material, the Thalanyji Traditional Owners recommended monitoring of all ground disturbance works during the construction of the Onslow Recreational Jetty Project.
- 10) The Project Area may be subject to negotiations between the Shire of Ashburton and BTAC under the *Native Title Act 1993*, and this report is not to be construed as providing any consents by BTAC for any land interests under Native Title.

Map 6. High Risk Zone for Sub-Surface Archaeological Sites



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APPENDIX ONE – COORDINATE DATA

Table 11. Coordinates for Surveyed Onslow Recreational Jetty Project Area

ID	Node	Easting	Northing	Notes
Onslow Recreational Jetty Project Area	1	304339.288	7606569.503	Complete
	2	304153.723	7606556.808	
	3	304155.038	7606647.348	
	4	304261.010	7606741.665	
	5	304253.337	7606976.823	
	6	304324.628	7606978.482	
	7	304339.288	7606569.503	

(Datum GDA94; Zone 50K; Accuracy ± 5 m)

APPENDIX TWO – ACHIS REGISTER SEARCHES

Search Criteria

1 Aboriginal Cultural Heritage (ACH) Register in Shapefile - Survey Area

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Aboriginal heritage holds significant value to Aboriginal people for their social, spiritual, historical, scientific, or aesthetic importance within Aboriginal traditions, and provides an essential link for Aboriginal people to their past, present and future. In Western Australia Aboriginal heritage is protected under the *Aboriginal Heritage Act 1972*.

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List of Aboriginal Cultural Heritage (ACH) Register

Terminology

ID: ACH on the Register is assigned a unique ID by the Department of Planning, Lands and Heritage using the format: ACH-00000001. For ACH on the former Register the ID numbers remain unchanged and use the new format. For example the ACH ID of the place Swan River was previously '3536' and is now 'ACH-00003536'.

Access and Restrictions:

- **Boundary Reliable (Yes/No):** Indicates whether to the best knowledge of the Department, the location and extent of the ACH boundary is considered reliable.
- **Boundary Restricted = No:** Represents the actual location of the ACH as understood by the Department.
- **Boundary Restricted = Yes:** To preserve confidentiality the exact location and extent of the place is not displayed on the map. However, the shaded region (generally with an area of at least 4km²) provides a general indication of where the ACH is located. If you are a landowner and wish to find out more about the exact location of the place, please contact the Department of Planning, Lands and Heritage.
- **Culturally Sensitive = No:** Availability of information that the Department of Planning, Lands and Heritage holds in relation to the ACH is not restricted in any way.
- **Culturally Sensitive = Yes:** Some of the information that the Department of Planning, Lands and Heritage holds in relation to the ACH is restricted if it is considered culturally sensitive information. This information will only be made available if the Department of Planning, Lands and Heritage receives written approval from the people who provided the information. To request access please contact via <https://achknowledge.dplh.wa.gov.au/ach-enquiry-form>.
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 - **No Gender / Initiation Restrictions:** *Anyone* can view the information.
 - **Men only:** Only *males* can view restricted information.
 - **Women only:** Only *females* can view restricted information.

Status:

- **Register:** Aboriginal cultural heritage places that are assessed as meeting Section 5 of the *Aboriginal Heritage Act 1972*.
- **Lodged:** Information which has been received in relation to an Aboriginal cultural heritage place, but is yet to be assessed under Section 5 of the *Aboriginal Heritage Act 1972*.
- **Historic:** Aboriginal heritage places assessed as not meeting the criteria of Section 5 of the *Aboriginal Heritage Act 1972*. Includes places that no longer exist as a result of land use activities with existing approvals.

Place Type: The type of Aboriginal cultural heritage place. For example an artefact scatter place or engravings place.

Legacy ID: This is the former unique number that the former Department of Aboriginal Sites assigned to the place.

Coordinates

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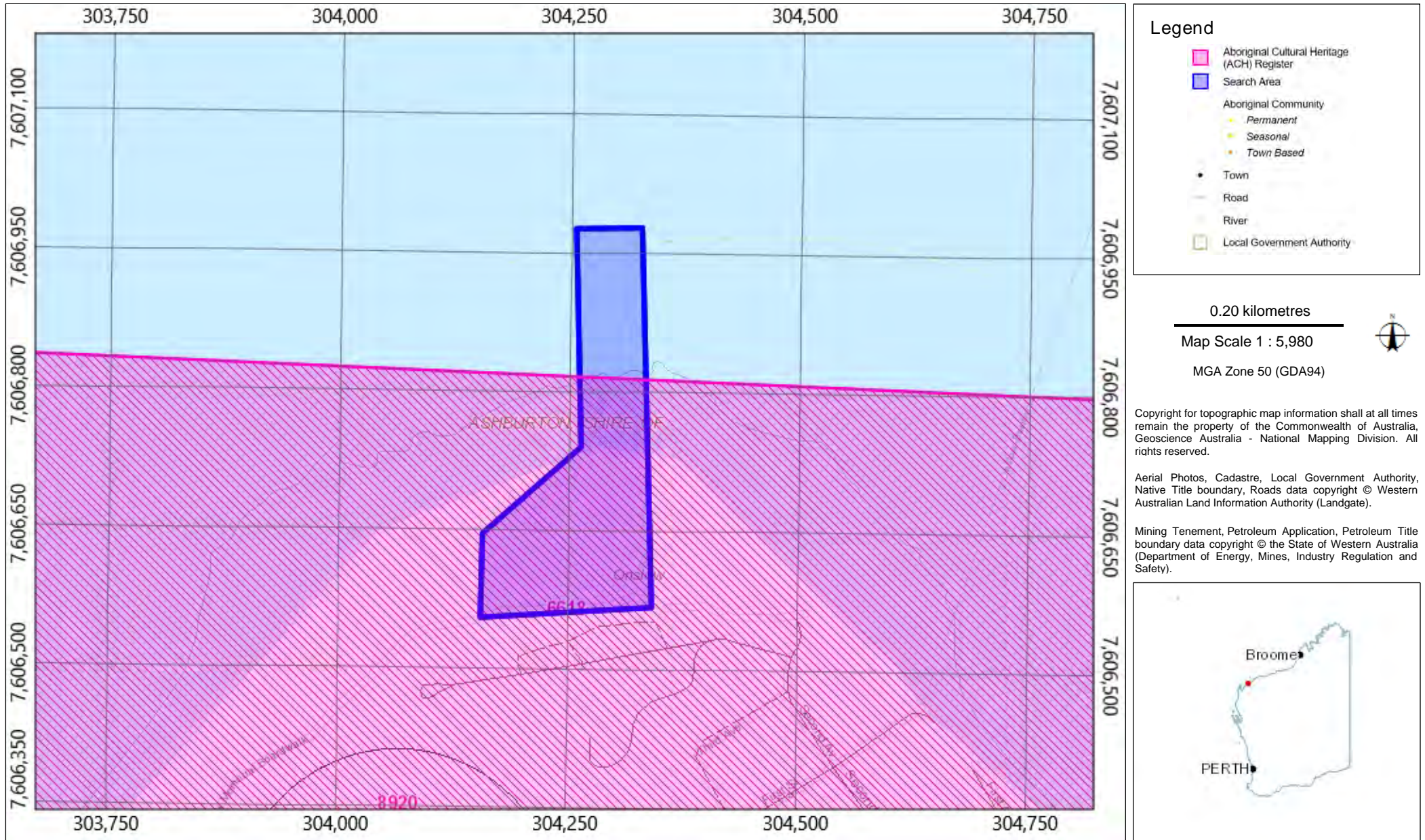
List of Aboriginal Cultural Heritage (ACH) Register

ID	Name	Boundary Restricted	Boundary Reliable	Culturally Sensitive	Culturally Sensitive Nature	Status	Place Type	Knowledge Holders	Legacy ID
6618	DEW TALU.	Yes	Yes	Yes	No Gender / Initiation Restrictions	Register	Ritual / Ceremonial; Water Source	*Registered Knowledge Holder names available from DPLH	P06363

Aboriginal Cultural Heritage Inquiry System

Map of Aboriginal Cultural Heritage (ACH) Register

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Search Criteria

No Aboriginal Cultural Heritage (ACH) Lodged in Shapefile - Survey Area

Disclaimer

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List of Aboriginal Cultural Heritage (ACH) Lodged

Coordinates

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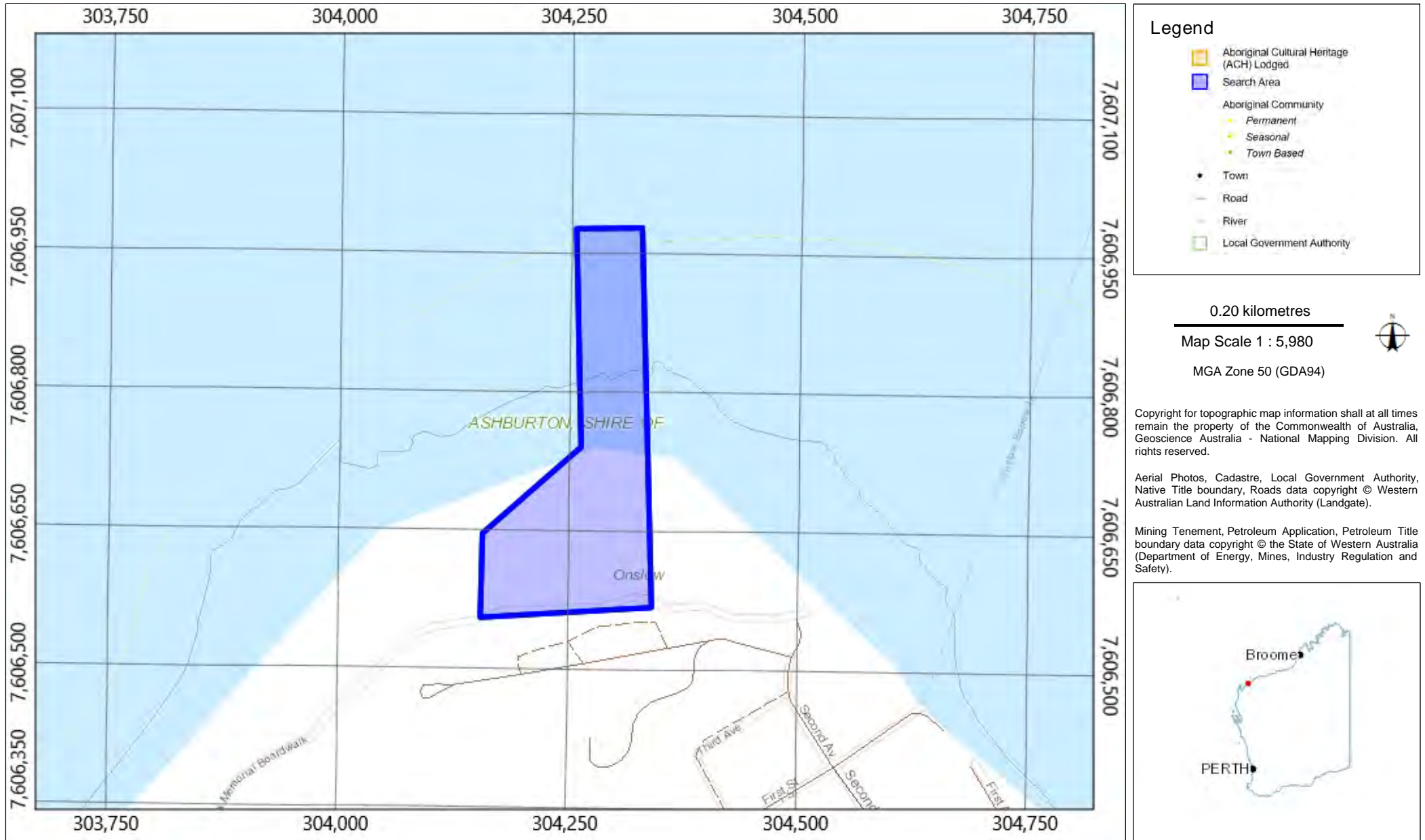
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List of Aboriginal Cultural Heritage (ACH) Historic

Search Criteria

1 Aboriginal Cultural Heritage (ACH) Historic in Shapefile - Survey Area

Disclaimer

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List of Aboriginal Cultural Heritage (ACH) Historic

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 - Men only: Only males can view restricted information.
 - Women only: Only females can view restricted information.

Status:

- Register: Aboriginal cultural heritage places that are assessed as meeting Section 5 of the Aboriginal Heritage Act 1972.
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- Historic: Aboriginal heritage places assessed as not meeting the criteria of Section 5 of the Aboriginal Heritage Act 1972. Includes places that no longer exist as a result of land use activities with existing approvals.

Place Type: The type of Aboriginal cultural heritage place. For example an artefact scatter place or engravings place.

Legacy ID: This is the former unique number that the former Department of Aboriginal Sites assigned to the place.

Coordinates

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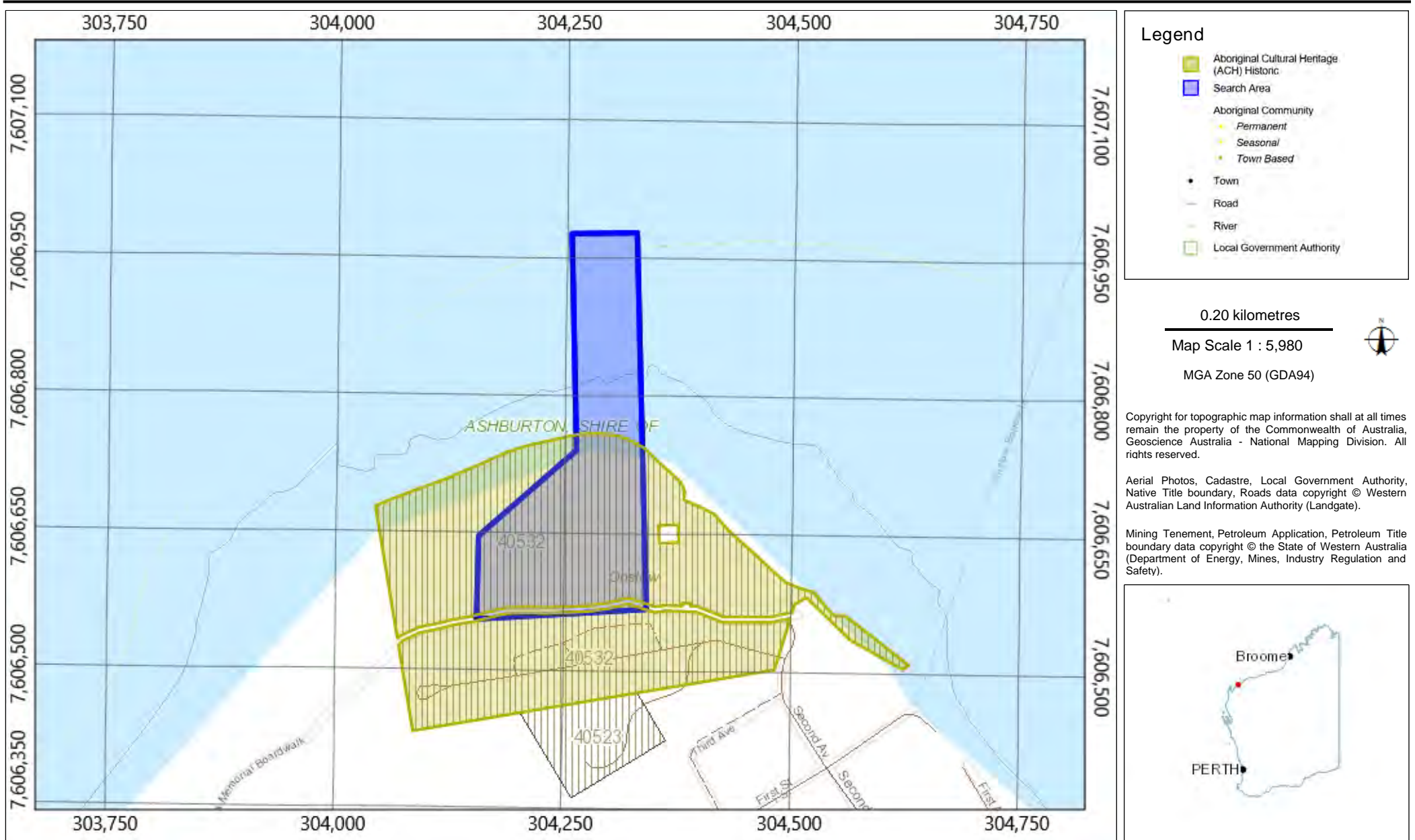
List of Aboriginal Cultural Heritage (ACH) Historic

ID	Name	Boundary Restricted	Boundary Reliable	Culturally Sensitive	Culturally Sensitive Nature	Status	Place Type	Knowledge Holders	Legacy ID
40532	Onslow Foreshore	No		No		Historic	Sub surface cultural material	*Registered Knowledge Holder names available from DPLH	

Aboriginal Cultural Heritage Inquiry System

Map of Aboriginal Cultural Heritage (ACH) Historic

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List of Heritage Surveys

Search Criteria

No Heritage Surveys in Shapefile - Survey Area

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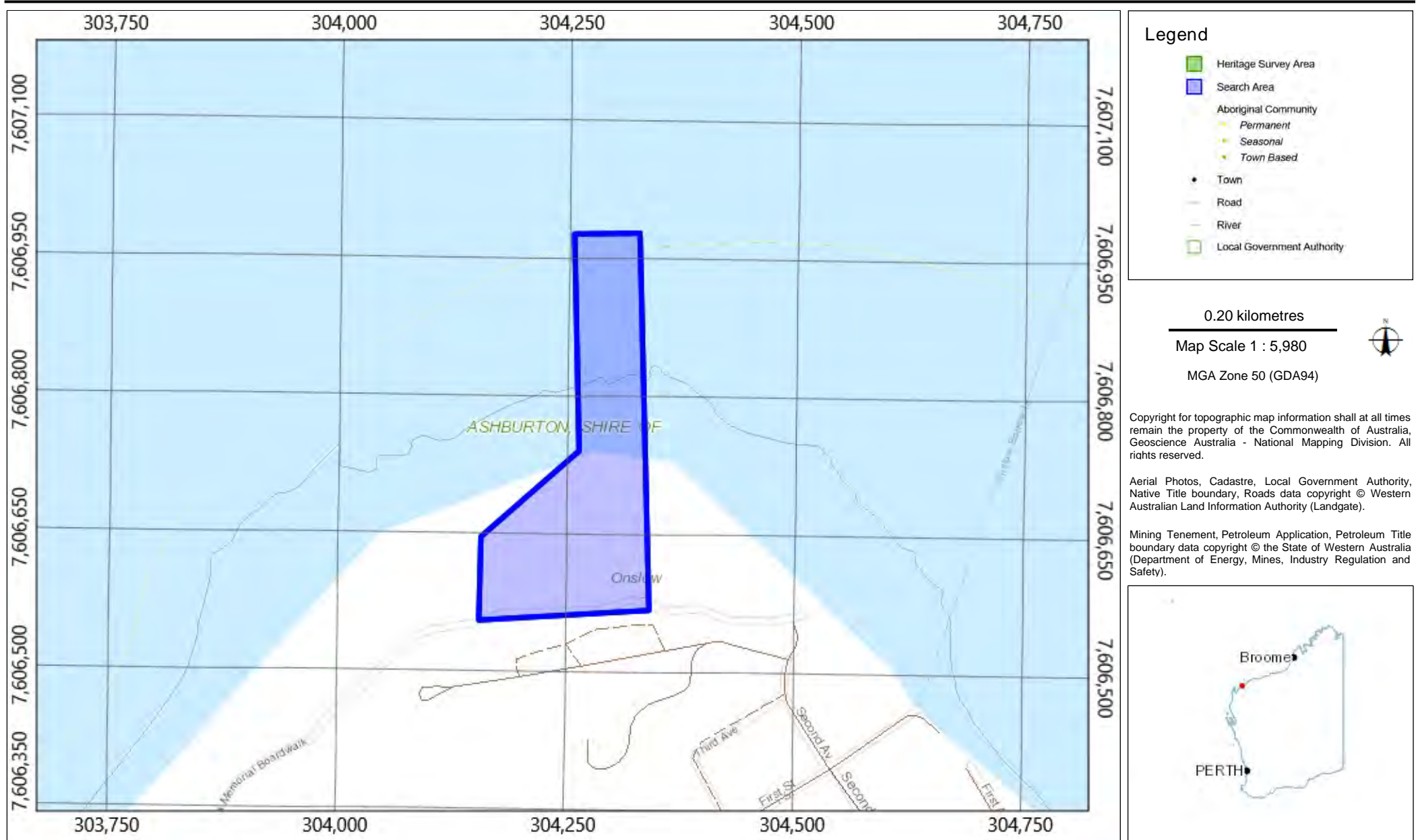
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Map of Heritage Survey Areas

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List of Heritage Surveys

Search Criteria

5 Heritage Surveys containing 5 Survey Areas in Custom search area - Polygon - 115.103338087262°E, 21.6391236297683°S (GDA94) : 115.103338087262°E, 21.6288314157918°S (GDA94) : 115.115011060895°E, 21.6288314157918°S (GDA94) : 115.115011060895°E, 21.6391236297683°S (GDA94) : 115.103338087262°E, 21.6391236297683°S (GDA94)

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Spatial Accuracy

The following legend strictly applies to the spatial accuracy of heritage survey boundaries as captured by DPLH.

Very Good	Boundaries captured from surveyed titles, GPS (2001 onwards) submitted maps georeferenced to within 20m accuracy.
Good / Moderate	Boundaries captured from GPS (pre 2001) submitted maps georeferenced to within 250m accuracy.
Unreliable	Boundaries captured from submitted maps georeferenced to an accuracy exceeding 250m.
Indeterminate	Surveys submitted with insufficient information to allow boundary capture.

List of Heritage Surveys

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Aboriginal Cultural Heritage Inquiry System

List of Heritage Surveys

Survey Report ID	Survey Area ID	Report Title	Report Authors	Survey Program	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
17913	13396	Report on a Survey for Aboriginal Sites at the Proposed Exmouth Salt Pty Ltd Saltworks, Onslow. Dec.1989.	Quartermaine G		Archaeological/ Ethnographic	The survey area consists of the saltworks haul road and loadout area as shown in figure 1. The haul road was surveyed to a width of 50m.	Moderate	Field and Desktop
27735	16871	Section 18 Archaeological Survey & Ethnographic Desktop Study for the Proposed Onslow Residential & Industrial Areas - Area 1, Pilbara, WA	Puletama, Daniel		Archaeological/ Ethnographic	LandCorp Onslow residential development area (Area 1), coastal Pilbara, WA	Good	Field and Desktop
200021	19458	Report on Cultural Heritage Surveys of Places at Onslow and Port Hedland, WA Where a Submarine Fibre Optic Cable May Come Ashore	Webb, R. Esmee		Archaeological	Onslow and Port Hedland, WA Where a Submarine Fibre Optic Cable May Come Ashore		Field and Desktop
200190	19707	Report of an Ethnographic Survey of the Proposed Onslow Ring Road, Onslow, Pilbara, Western Australia February 2015. [TBD]	McDonald, Edward M		Ethnographic	Report of an Ethnographic Survey of the Proposed Onslow Ring Road, Onslow, Pilbara, Western Australia February 2015. [TBD]	Good	Field and Desktop
200191	19697	Report of an Aboriginal Archaeological Survey of the Proposed Onslow Ring Road Construction Corridor, Onslow, Western Australia. : January 2015, [TBD]	Stedman, Jim		Archaeological	Report of an Aboriginal Archaeological Survey of the Proposed Onslow Ring Road Construction Corridor, Onslow, Western Australia. : January 2015, [TBD]	Good	Field and Desktop

Aboriginal Cultural Heritage Inquiry System

Map of Heritage Survey Areas

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